RAILWAY AGE

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY

MAY 5, 1952

FREIGHT TRAFFIC ISSUE

TOTAL DISTRIBUTION THIS ISSUE — 20,325

IVERSITY
MICHIGAN

Y 19 1952

NSPORTATION
LIBRARY

In these new FRUIT GROWERS EXPRESS mechanically refrigerated cars . . .

BYERS WROUGHT IRON BRAKE PIPING

fights fatigue and corrosion

To safeguard the air brake piping on these new mechanically refrigerated cars from premature failure due to vibration and corrosive conditions, the engineers specified a time-proven material—genuine wrought iron pipe.

These new Fruit Growers Express cars, designed to provide zero temperature from shipping point to destination, are part of the company's continuing program to improve the handling of frozen food shipments.

The ability of Byers Wrought Iron pipe to resist fatigue and corrosion are not the only qualities that recommend it for air brake piping, for it has other outstanding advantages that show up during installation. It stands the punishing short-radius bends that must be made during fitting, without any adverse effect on its composition or character. And because of its freedom from "spring back," it is easy to bend, simplifies fitting, and eliminates stored strains that are destructive to pipe life and connected equipment.

Its widespread use by the nation's major carriers is the best evidence of its superior durability and economy.

Write today for our booklet, THE ABC's OF WROUGHT IRON. It will give you accurate information on the properties and qualities of genuine wrought iron.

A. M. Byers Company, Pittsburgh, Pa. Established 1864. Boston, New York, Philadelphia, Washington, Atlanta, Chicago, St. Louis, Houston, San Francisco. Export Division: New York, N. Y.

Why

Genuine Wrought Iron Lasts

This notch-fracture test specimen illustrates the unique fibrous structure of genuine wrought iron—which is responsible for the high corrosion resistance of the material. Tiny threads of glass-like silicate slag, distributed through the body of high-purity iron, halt and disperse corrosive attack, and discourage pitting and penetration. They also anchor the initial protective scale, which shields the underlying metal.

BYERS

CORROSION COSTS YOU MORE THAN WROUGHT IRON

WROUGHT IRON

TUBULAR AND HOT ROLLED PRODUCTS

ELECTRIC FURNACE QUALITY ALLOY AND STAINLESS STEEL PRODUCTS

MEMO

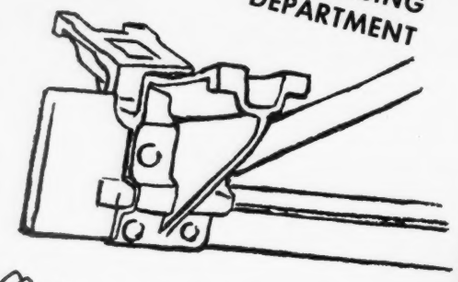
CAR DEPARTMENT

Re: Trucks We can get any of these as UNIT TRUCKS..

A-3 Ride Control
Barber Stabilized
Barber Bettendorf
National C-1
Scullin L-V
Snub Up
Buckeye C-R
Chrysler Design
AAR Double Truss

MEMO

PURCHASING DEPARTMENT

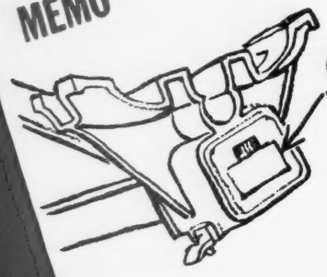


Buffalo Solid Truss Brake Beams are the only UNIT type beams with the renewable brake heads

Better Buy Buffalo

MEMO

PURCHASING DEPARTMENT



Slips on and off without special tools

For hangered brake beams it's the Buffalo TRUSLOCK with the quick-change brake head

Better Buy Buffalo

BUFFALO BRAKE BEAM CO. . . . 140 CEDAR ST., NEW YORK

Vol. 132, No. 18 May 5, 1952

RAILWAY AGE

With which are incorporated the Railway Review, the Railroad Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office and Trade Mark Office in Canada.

Simmons-Boardman Publishing Corporation: James G. Lyne, President. Samuel O. Dunn, Chairman Emeritus. J. S. Crane, Vice-President and Secretary. C. Miles Burpee, Harry H. Melville, C. W. Merriken, John R. Thompson, William H. Schmidt, Jr., J. S. Vreeland, Fred W. Smith, Vice-Presidents. Robert G. Lewis, Assistant to President, Arthur J. McGinnis, Treasurer. Ralph E. Westerman, Assistant Treasurer.

EDITOR ..... James G. Lyne
EDITORIAL CONSULTANT ..... Samuel O. Dunn
MANAGING EDITOR ..... C. B. Tavenner
WESTERN EDITOR ..... William H. Schmidt, Jr.
NEWS & FINANCIAL EDITOR .... Gardner C. Hudson
WASHINGTON OFFICE . . .
Walter J. Taft Joe W. Kizzia
TRAFFIC & TRANSPORTATION DEPARTMENT . . .
Robert G. Lewis John W. Milliken
John S. Gallagher, Jr.
MECHANICAL DEPARTMENT . . .
C. B. Peck E. L. Woodward
H. C. Wilcox C. L. Combes G. J. Weihofen
ELECTRICAL DEPARTMENT ..... Alfred G. Oehler
ENGINEERING DEPARTMENT . . .
M. H. Dick Henry E. Michael
Radford E. Dove Ralph M Schmidl
PURCHASES & EQUIPMENT ..... Fred C. Miles
SIGNALING & COMMUNICATIONS DEPARTMENT .. John H. Dunn
WESTERN NEWS DEPARTMENT .. Arthur M. Cox, Jr.
ASSOCIATE EDITOR ..... Charles Layng
LIBRARIAN ..... Edith C. Stone
EDITORIAL ASSISTANT ..... Elaine C. Farrar

Published weekly by the Simmons-Boardman Publishing Corporation at Orange, Conn., and entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price, $3.00 a year to railroad employees only in U. S., U. S. possessions, Canada and Mexico, payable in advance and postage free. Subscription price to railroad employees elsewhere in the Western Hemisphere, $10.00 a year; in other countries, $15.00 a year. Two-year subscriptions double the one-year rate. Single copies 50¢, except special issues $1. Address Robert G. Lewis, Assistant to President, 30 Church Street, New York 7.

IN THIS ISSUE

EDITORIAL COMMENT:

Shippers and the Passenger Deficit 63
Two Requirements of a Car-Building Program 64

FREIGHT TRAFFIC ARTICLES:

Mister P.R.R. at Waynesboro, Pa. 65
A New Freighthouse for Faster, More Economical Service 67
How the C. & O.'s Pere Marquette District Is Combating Loss and Damage to Freight 72
Northern Pacific Installs Two-Channel Train and Wayside Radio 76
What's the Shippers' Interest in Efficient Car Handling?, by E. W. Coughlin 82

GENERAL ARTICLES:

Bench Marks and Yardsticks—9 85
"We Streamlined Our Accounting," by A. J. Sevener 86
E. S. French Retires as President of B. & M. and Me. C. 90
Pennsylvania Closes Broad Street Station 92

NEWS FEATURES:

Sawyer Suggests Removal of "Barriers" to Formation of Transport Companies 11
Norfolk Southern Hearings Recessed until June 18 12
New Services of Interest to Shippers 13
Railroads Would End "Non-Sked" Air Services 14

DEPARTMENTS:

News of the Railroad World 11
New and Improved Products 61
New Book 91
Operating Revenues and Expenses 114

Editorial and Executive Offices at 30 Church Street, New York 7, N. Y., and 79 West Monroe Street, Chicago 3, Ill. Branch Offices: 1081 National Press Building, Washington 4, D. C.—Terminal Tower, Cleveland 13, Ohio.—Terminal Sales Building, Portland 5, Ore.—1127 Wilshire Boulevard, Los Angeles 17, Cal.—244 California Street, San Francisco 4, Cal.—2909 Maple Avenue, Dallas 4, Tex.

Published by SIMMONS-BOARDMAN PUBLISHING CORPORATION, New York 7

Railway Age Railway Mechanical & Electrical Engineer Railway Engineering & Maintenance
Railway Signaling & Communications Car Builders' Cyclopedia Locomotive Cyclopedia
Railway Engineering & Maintenance Cyclopedia American Builder
Marine Engineering & Shipping Review Marine Catalog & Directory
Books covering transportation and building

Railway Age is a member of Associated Business Publications (A. B. P.) and Audit Bureau of Circulation (A. B. C.) and is indexed by the Industrial Arts Index and by the Engineering Index Service. Printed in U. S. A.

Saving

$ OPERATING...
MAINTENANCE...
MATERIAL EXPENSE

Here are facts from one record*

1. On a total of 34 miles of double railroad track . . . 22.4 miles were converted to single track.
2. Advantage of efficient direction of train movements from one point was obtained.
3. Maintenance of Roadway greatly reduced.
4. Salvaged rails, ties, and ballast were used at other places.

** Additional factual data will be supplied on request*

"UNION" Centralized Traffic Control can reduce terminal-to-terminal time with safety and pay its way through reductions in operating expenses. May we help you?

UNION SWITCH & SIGNAL

DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY

SWISSVALE PENNSYLVANIA

NEW YORK CHICAGO ST. LOUIS SAN FRANCISCO

WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, two months	
1952	$1,712,000,596
1951	1,564,685,412
Operating expenses, two months	
1952	$1,335,056,113
1951	1,253,704,210
Taxes, two months	
1952	$ 206,697,408
1951	181,224,306
Net railway operating income, two months	
1952	$ 141,962,386
1951	98,153,367
Net income, estimated, two months	
1952	$ 91,000,000
1951	53,000,000
Average price railroad stocks	
April 29, 1952	59.73
May 1, 1951	56.68
Car loadings, revenue freight	
16 weeks, 1952	11,470,966
16 weeks, 1951	11,821,492
Average daily freight car surplus	
Week ended April 26, 1952	18,047
Week ended April 28, 1951	7,253
Average daily freight car shortage	
Week ended April 26, 1952	1,683
Week ended April 28, 1951	9,404
Freight cars delivered	
March 1952	8,159
March 1951	7,011
Freight cars on order	
April 1, 1952	115,854
April 1, 1951	158,619
Freight cars held for repairs	
April 1, 1951	88,246
April 1, 1952	94,509
Net ton-miles per serviceable car per day	
February 1952	1,027
February 1951	964
Average number railroad employees	
Mid-March 1952	1,220,658
Mid-March 1951	1,274,156

In This Issue . . .

THIS FREIGHT TRAFFIC ISSUE includes a description of the technique employed by the Chesapeake & Ohio's Pere Marquette District to hold down loss and damage by giving a separate department control of the program of preventive and corrective measures, at the same time appropriating the skills and technical knowledge of the mechanical, operating and other departments of the railroad wherever effectiveness of the loss and damage program will be enhanced (page 72). Other articles deal with the Rock Island's new Kansas City freighthouse (page 67), with a day in the life of a Pennsylvania freight agent (page 65), and with Shippers Board activities in securing more efficient utilization of freight cars (page 82).

RADIO ON FREIGHT TRAINS is no longer news, but the Northern Pacific's latest installation, on 410 miles of line between Dilworth, Minn., and Glendive, Mont., has features that indicate that substantial progress is still being made in adapting this means of communication to the varying needs of railroad operation. Among the advantages that mean much to the railroad's customers as well as to its management and employees, as set forth in the article on page 76, are those that grow out of curtailing delays caused by hot boxes, dropped brake rigging, storms, floods, and other mishaps.

FREIGHT CARS are in reasonably good supply at the moment, but the need for a determined effort to get an accelerated car-building program under way, and to *keep it going* until the railroads' inventory of good, modern cars is built up to substantially higher levels, is just as urgent as it has been for years past. One of this issue's editorials (page 64) reviews the current situation, emphasizing the importance of liberal materials allocations now and of railroad support of a long-range program through a large and steadily maintained backlog of orders for new cars.

In Washington . . .

REGARDLESS OF HOW THE ELECTIONS GO this fall, the railroads are already making plans to move to the nation's capital the thousands of people who will attend the inauguration of the President next January. Sidney Kerl, Washington terminal manager, pointed out that at the last inauguration, more than 400 extra sleeping cars were used to bring groups and individuals from all parts of the United States to Washington, and that about 250 of these cars were parked at rail sidings there to serve as temporary living quarters for some 5,000

WEEK AT A GLANCE

persons. This "Pullman City," complete with heating, lighting and water facilities, literally sprang up overnight and was especially helpful in housing large groups in inaugural-crowded Washington. Among these, Mr. Kerl said, was the entire cadet corps of the United States Military Academy, more than 2,000 members of which traveled in seven special trains. On inaugural day in 1949, more than 130,000 passengers arrived and departed at Washington Union Station, requiring use of 3,367 passenger cars and locomotives.

ANOTHER $30 MILLION A YEAR—that's what the railroads figure the additional cost to them, ultimately, of legislation that has passed the Senate and is on its way through the House, practically doubling the "benefits" payable under the Railroad Unemployment Insurance Act. The "tax" of course will be paid entirely by the railroads—another expense beyond control of management which whittles away at railroad revenues.

TRANSPORTATION QUESTIONS came up for discussion last week at the annual meeting of the Chamber of Commerce of the United States. As reported in this issue's news pages, Secretary of Commerce Sawyer, who participated in the program, indicated a willingness to see transferred to his department more "non-regulatory" functions of various government agencies dealing with transportation. For example, the secretary would not be loath to take over several of the Interstate Commerce Commission's jobs.

NORFOLK SOUTHERN affairs have been the subject of intensive I.C.C. scrutiny in recent months, culminating in a public hearing in which salaries and expense accounts of the road's officers and directors, and transactions involving various subsidiaries, were reviewed and commented on at length by commission counsel and investigators. The railroad's side of the case is scheduled to be made public when the hearing is resumed June 18.

THAT RAILWAY MANAGEMENT is "doing the best it possibly can" under today's difficult conditions was emphasized by Cleve H. Pomeroy (above), president of the National Malleable & Steel Castings Co., in the course of a recent talk to the New York Society of Security Analysts. "There is," Mr. Pomeroy said, "a revival of spirit, energy, vigor and brilliance in present railway management that I have not seen before in 30 years in the railway supply business. There is a new feeling of pride throughout the industry."

. . . And Elsewhere

"PAR"—"Project Adequate Roads"—is likely to receive a lot of skillful publicity in the next few months or years, if the truckers and their well-heeled friends have their way. "PAR" apparently consists of five basic elements, designed for their obvious appeal to the public: (1) A priority program of highway development; (2) classification of roads into systems, according to traffic service; (3) fair distribution of costs among all highway beneficiaries; (4) "protection" of highway funds to assure their use for highway purposes; and (5) efficient highway administration. The obvious jokers are points 2 and 3. To some truckers, "fair distribution of costs" has been known to mean letting someone else pay it all; "classification of roads" has meant spending all the available money on those the truckers use.

THE OLD WEST has taken one more step into the forgotten past with complete abandonment of one of the country's few remaining narrow-gage railroads—southwestern Colorado's Rio Grande Southern. It will take another step, if the D. & R.G.W. is allowed to follow through with its proposal to abandon some of its own narrow-gage lines and convert others to standard gage. The once busy little "thin-gagers" may have outlived their economic usefulness, but they leave, somehow, a nostalgic void which trucks and buses can never fill.

Sawyer Suggests Removal of "Barriers" To Formation of "Transport Companies"

Removal of "corporate and other barriers" between different agencies "might tend to enhance recognition and preservation of the inherent advantages of each form of transportation," Secretary of Commerce Sawyer said in an April 29 address at the transportation session of the annual meeting of the Chamber of Commerce of the United States.

The meeting was held last week in Washington, D.C., and the transport session was a luncheon at the Mayflower Hotel. Other speakers were Charles H. Beard, general traffic manager, Union Carbide & Carbon Corp., who is also chairman of the Government Transport Organization subcommittee of the Chamber's Transportation and Communication Committee; and Harold F. Hammond, manager of the Chamber's Transportation and Communication Department. Presiding was Evans A. Nash, chairman of the Transportation and Communication Committee.

The statement reported above indicates that Mr. Sawyer would favor less restrictive policies than the Interstate Commerce Commission and Civil Aeronautics Board now think they are required to maintain with respect to railroad operations of highway and air services. Following through to develop his thought, the secretary had this to say:

"Perhaps joint rates and services should be required of all carriers, no matter what type, and the grouping of carriers of like and different kinds be permitted, under regulations which would insure sound competition among carriers generally. In this atmosphere of coordination might develop a unified transportation system instead of the present loose, forced confederacy of several mutually suspicious and antagonistic industries."

Generally, Mr. Sawyer's address was a highlight review of the transportation report which he submitted to President Truman about 2½ years ago (*Railway Age* December 17, 1949, page 51). Among that report's recommendations, which Mr. Sawyer reiterated, were its call for studies of transport subsidies, and of the desirability of imposing user charges on transport facilities provided by the government. The secretary also discussed the organization and role of the Office of the Under Secretary for Transportation which has been set up in his department.

That office, he noted, "has no regulatory function," nor does the Commerce Department as a whole—"except in international ocean and international air transportation." On this regulatory matter, the secretary later made this further statement:

"I wish to emphasize the fact that no program which I advocate or participate in contemplates any merger of the regulatory and promotional functions of the government. As I said in my report in 1949, these should be kept completely separate, and I wish thoroughly to disabuse the mind of anyone who has felt the effort to deal with the transportation program in the manner I have outlined reflects a desire on the part of my department to take over regulatory functions."

Meanwhile, however, Mr. Sawyer reiterated his previous recommendations calling for transfer to his department of what he considered non-regulatory functions. "The independent regulatory agencies," he said, "should be relieved of certain important but appendage functions which are not legislative nor quasi-judicial. . . . A further study of the Interstate Commerce Commission might be fruitful in connection with this point. This, the oldest commission, at times in the past has been given functions because there was no other agency suited to take them over. It should be feasible as well as beneficial to relieve the commission of some of these duties such as, for instance, equipment inspection, standard time regulation, and enforcement of safety regulations."

Department Plans

As to the plans of his department's Office of Transportation, Mr. Sawyer said it will frame a legislative program of its own on the basis of "research and related policy-developing activity." He also said the office's effort "will be to see that the transportation activities of the federal government are non-conflicting, and that they promote a well-rounded, privately owned and operated transportation industry, furnishing adequate service at the lowest overall cost consistent with that service."

Earlier in his address, the secretary had referred to the government-owned Inland Waterways Corporation which

operates the Federal Barge Lines; but he called that a "minor exception" to the government's "policy of not operating or owning transportation facilities."

Mr. Beard's address was a discussion of the chamber's transport policies. Among other comment, he said the Transportation and Communication Committee has agreed that present policy "in favor of a single federal regulatory, administrative and promotional agency for all forms of transport should be given further study, including a referendum of the entire chamber membership, to be accompanied by a pro and con statement of the entire subject."

Norfolk Southern Hearings Recessed Until June 18

The Norfolk Southern hearings before Examiner Mohundro of the Interstate Commerce Commission have been adjourned with a request by the railroad that it not be judged before presenting its own case. A. J. Winder, general solicitor, made the request as the hearings recessed until June 18. (*Railway Age*, April 28, page 17).

"Since the commission has made this a public hearing and only one side of the picture has been presented, we earnestly request the public to withhold judgment until the management side is presented," Mr. Winder said in a statement which he read into the record.

He went on to say that when hearings are resumed, and the road's management presents its case, it will show these things: The road's physical properties are in better condition than at any time in the past; bonded indebtedness and annual fixed charges are the lowest in N.S. history; annual net incomes are highest in the company's history; regular dividends are paid on the common stock, and the present management has endeavored to eliminate unprofitable and wasteful operations and overcome deferred maintenance "inherited from its predecessors."

The commission is conducting an investigation, instituted last January on its own motion, into the "management, accounting, financial and other practices" of the Norfolk Southern, its bus company and other subsidiaries and several of its principal officers.

At the April 22-24 hearings, the commission presented its case. As Mr. Winder put it, this case would leave the impression that the road "pays some of its officers and directors too much money for their services, that some of its officers incur unusually extravagant expense accounts, and have made questionable investments of the railway funds."

At the conclusion of the hearings, two N.S. directors filed with the road's general solicitor a request for a "special meeting" of stockholders to be held May 28 "for the purpose of reducing the number of board members from 18 to 11, to remove the present board and to elect a new one."

Perry N. Selheimer and his brother, H. C. Selheimer, representing "about 35 per cent" of the outstanding stock, made the request. They said in view of the exhibits made available at the hearings they believed "that steps should be taken immediately to change the management" of the road.

Both men are members of the N.S. board. According to one exhibit P. N. Selheimer has received, from the N.S. and subsidiaries, $42,270 in "salaries, bonuses and fees" in the 1947-1951 period. H. C. Selheimer received $6,696.

Among the exhibits offered in support of the commission's investigator's testimony, several related to loans made by the N.S. to its various subsidiaries. The purport of these documents was that the road made cash advances to two warehouse subsidiaries for officer salaries and director fees which were in excess of the earnings of such subsidiaries. A commission witness, Richard J. Ferris, testified the warehouse companies have "nowhere near a sufficient amount" to pay back these advances.

Another exhibit contained figures showing that in 1950 the N.S. paid "salaries and expenses to general officers" amounting to $258,347, compared with an average of $205,565 paid by 31 other selected railroads. For the same year, "total revenues" of the N.S. amounted to $9,573,562, compared with an average of $42,686,281 for the other 31 roads.

When the hearings are resumed June 18, the commission is expected to supplement the evidence already presented. The North Carolina Public Utilities Commission has indicated it will make a presentation, while counsel for the road will crossexamine the commission's witness, Mr. Ferris, and offer evidence in the road's defense.

Santa Fe Officers to Attend Business Seminar

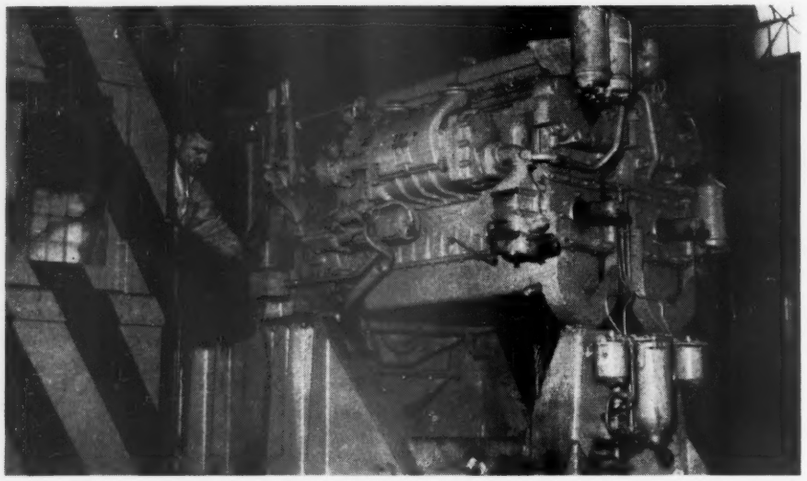
Thirty-two "middle" officers of the Atchison, Topeka & Santa Fe will attend an Institute of Business Economics—a six-weeks seminar for corporation executives on principles and mechanics of the free enterprise system, which is to be started this summer by the University of Southern California's School of Commerce. The school will be headed by Dean Lawrence C. Lockley and will be conducted by members of U.S.C.'s faculty, who will meet with the Santa Fe officers daily for round-table discussions, during which all phases of the nation's business and political structure will be examined and explained.

4th Quarter Car Program Submitted to D.P.A.

Members of the Railroad Industry Advisory Committee met last week with the National Production Authority to go over a proposed fourth-quarter program of allocations for the railroads.

The program was drafted by the Defense Transport Administration and has been approved by N.P.A.'s Railroad Equipment Division. It is now before the Defense Production Administration for final determination.

As outlined to the advisory committee, the program calls for: 33,000 freight cars, including 2,000 tank cars; 1,021 locomotive units; 100 passenger



MORE DIESELIZATION FOR AUSTRALIA—The Victorian (Australia) Railways' fleet of 10 gasoline-electric rail motors, which are nearing the three-quarters-of-a-million mileage figure, are to be fitted with diesel engines built in America by the Electro-Motive Division of General Motors Corporation. The first of the rejuvenated rail-motors went into service recently on one of the main arteries of the system. The cars are also being repainted and provided with more modern seats. Seventeen 1,500-hp. diesel-electric fast passenger and freight locomotives for the Victorian Railways have been ordered for delivery this year. Power units for these locomotives also are supplied by Electro-Motive.

cars, and 450,000 tons of rails. This program is in line with figures contained in D.T.A.'s recent study of freight car needs. (*Railway Age*, April 14, page 12).

Among other things, N.P.A. advised the committee that the stated third-quarter requirement for 400,000 tons of rails has been reduced to 387,000 tons. Members of the industry group said this tonnage would be insufficient to meet both the needs of railroads and transit systems.

The matter of "seasonality" with respect to track laying was also discussed, and committee members told N.P.A. they would prefer getting rails only when they actually need them. Present regulations require roads to continue ordering rails throughout the winter season.

Other matters before the meeting included a discussion of the advisability of eliminating unit production controls in the industry. The agency said it cautioned the industry against surpassing "authorized production schedules and exceeding permitted inventories of materials."

Traffic Study Group Sends Out Fifth Questionnaire

The Railroads' Tariff Research Group has sent out the fifth of the series of questionnaires whereby it is seeking views of interested parties on ways and means of simplifying and otherwise improving tariffs.

Questionnaire No. 5 asks this question: Is it desirable or undesirable that tariff matter which, in form or arrangement, does not fully conform to the tariff-making rules of the I.C.C. and some of the states, include reference to the regulatory commission's "special permission" authorizing the deviation?

Like the Research Group's previous questionnaires, the foregoing was sent to a "selected list of freight tariff users in all interested fields." (*Railway Age* of March 31, page 58, and April 21, page 16.)

Jobless Pay Liberalizer Passed by the Senate

The Senate on April 24 passed, by a voice vote, a bill to liberalize the benefit provisions of the Railroad Unemployment Insurance Act. The bill is S. 2639, which is supported by the so-called "standard railway labor organizations."

It was sponsored by a group of senators headed by Senator Murray, Democrat of Montana, who is chairman of the Senate Committee on Labor and Public Welfare. An identical bill, H.R. 6525, has been reported favorably to the House by that body's Committee on Interstate and Foreign Commerce. That committee's chairman —Representative Crosser, Democrat of Ohio—is sponsor of the House bill.

The railroads opposed the proposed legislation at committee hearings held last March. The payroll tax which supports the unemployment and sickness insurance involved is paid entirely by the railroads.

As explained by Senator Murray, the bill would provide a new table of daily benefit rates ranging from a minimum of $3 to a maximum of $7.50. Present rates range from $1.75 to $3. Meanwhile, however, it would increase, from $150 to $300, the minimum yearly earnings necessary to qualify.

Officers of the Association of American Railroads, who made the railroad presentations in opposition to the legislation, estimated that the proposed increases in benefits would amount to 40 to 50 per cent, and that the annual increase in total benefit payments would amount to more than $30 million.

No immediate increase in the unemployment insurance tax would be involved. That tax is on a sliding-scale basis, and it ranges from 0.5 per cent to 3 per cent of taxable payroll, depending upon the size of the reserve fund. It is now at the minimum of 0.5 per cent.

In the course of its consideration of S. 2639, the Senate rejected a proposed amendment which would have had the effect of denying unemployment-insurance benefits to railroad employees directly involved in a strike. Such benefits are now denied only if the Railroad Retirement Board finds that the strike is in violation of the Railway Labor Act, or of the rules of a labor organization of which the strikers are members. The amendment was proposed by Senator Butler, Republican of Maryland.

Hollar Resigns Post At Commerce Department

Philip A. Hollar, Deputy Under Secretary of Commerce for Transportation since April 1951, has resigned. He will return to his position as vice-president of the American Car & Foundry Co.

Secretary of Commerce Charles

NEW SERVICES OF INTEREST TO SHIPPERS

NASHVILLE, CHATTANOOGA & ST. LOUIS — Train No. ASC-2, Atlanta, Ga., to Memphis, now leaves Bruceton, Ky., at 2:30 a.m. instead of 1:30 a.m. Scheduled arrival in Memphis is now 7 a.m. rather than 6:10 a.m.

NEW YORK CENTRAL—Has made the following changes in scheduled l.c.l. car lines:

Car lines discontinued:

Framingham, Mass., to Worcester and to Utica, N. Y.; Utica to Memphis (M. P.); Scranton, Pa. (D. L. & W.) to Syracuse, N. Y.

New car lines:

Framingham to Springfield, Mass.; Syracuse, N. Y., to Galesburg, Ill. (C. B. & Q.), Galewood, Ill. (C. M. St. P. & P.), and St. Louis (M. P.); Scranton (D. L. & W.) to Utica; Indianapolis to Champaign, Ill.; Rochester, N. Y., ("Pacemaker") to Indianapolis; Utica to St. Louis (M. P.); Sturgis, Mich., to Elkhart, Ind.; Goshen, Ind., to Utica; Yonkers, N. Y., to Poughkeepsie, N. Y. (tri-weekly); Yonkers ("Pacemaker") to Springfield, Mass. (tri-weekly).

PENNSYLVANIA—Has made the following changes in scheduled l.c.l. car lines:

Car lines discontinued:

Philadelphia (Federal street) to Milwaukee (C. & N. W.); New York (Desbrosses street) to Milwaukee (C. & N. W.); Fort Wayne, Ind., to Milwaukee (C. & N. W).

New car lines:

Louisville, Ky., to Altoona, Pa.; Philadelphia (Federal street) to Proviso Transfer, Ill. (C. & N. W.) New York (Desbrosses street) to Proviso Transfer (C. & N. W.); Fort Wayne, Ind., to Proviso Transfer.

The Pennsylvania is making a special drive to decrease damage to l.c.l. shipments of furniture. All agents are trying to get such shippers to load ferry cars to the most distant possible point. At furniture shipping stations an effort is made to load solid cars of furniture. If this is not possible, furniture is completely separated from other freight by bulkheads, even if two bulkheads are required. Special motor trucks equipped with furniture pads are to be used to pick up and deliver furniture. Letters from agents to the homes of freight handlers caution them to handle the freight as if "it were your own." All pick-up and delivery contractors are being brought into the furniture handling program.

Recent tests of canned goods shipping methods by the Pennsylvania in conjunction with some of its shippers showed the following results:

86 cars loaded by the bonded block method—damage 3.2 cases per car;

62 cars, combination bonded block and straight stack methods—damage 16.7 cases per car;

55 cars, straight stack method—damage 16.4 cases per car.

Sawyer accepted the resignation with the statement that Mr. Hollar performed "an outstanding and very constructive job" during his year with the department. It was during this year that an Office of Transportation was formed within the department to handle the department's transportation functions.

Mr. Hollar served as a consultant to the Defense Transport Administration for several months prior to his appointment as deputy under secretary. He has been with American Car & Foundry since 1946, and from 1942 to 1945 was with the Association of American Railroads. (*Railway Age*, April 23, 1951, page 42).

Oldest Shipper Board Holds 100th Meeting

The Northwest Shippers Advisory Board — the original shippers board, founded in Minneapolis on January 16, 1923 — passed a milestone with the holding of its 100th regular meeting on April 24, also in Minneapolis. Major General F. A. Heileman was the guest speaker at a luncheon marking the event, held jointly with the Traffic Club of Minneapolis and the Minneapolis Chamber of Commerce.

General Heileman prefaced his talk on the traffic management activities of the Department of Defense with the comment "The Army is not interested in holding onto the railroads. It will welcome with a loud cheer an opportunity to turn them back."

In discussing the importance of railroads in national defense, he said "I am neck-deep in the competition between different types of carriers. But when the chips are down, there is only one way the Army can move—by railroad, because only they have the equipment and the facilities for such mass movements."

"The Department of Defense is not interested," the general continued, "in establishing a long-haul military transportation system. The standing policy of using common carriers for most military shipments has proven satisfactory."

Suburban Operations —A Correction

On page 41 of the article on the Illinois Central Suburban Operations in the April 28 issue of *Railway Age* the figure given in the comparison table as to the number of cars in service on the Chicago, Rock Island & Pacific should have been 137, instead of the 124 which the road had at the time the table was originally compiled.

C. & N.W. Moves Division Headquarters to Milwaukee

Headquarters of the Chicago & North Western's Wisconsin division — described as the "busiest" of the road's 12 operating divisions—were removed from Chicago to Milwaukee, Wisc., on April 28.

Paul E. Feucht, executive vice-president, said the Milwaukee location was more centralized with respect to the division's operations and those of the adjoining Madison and Lake Shore divisions. Part of the first floor of the road's Milwaukee passenger terminal has been remodeled to accommodate the new offices. R. W. Heron was recently appointed superintendent of the Wisconsin division, as *Railway Age* reported on March 3, page 92.

H.C. Greer Appointed Dickinson Lecturer

Howard C. Greer, vice-president—finance of the Chicago, Indianapolis & Louisville, has been appointed Dickinson lecturer for 1952 at the Harvard Graduate School of Business Administration. Mr. Greer will give two lectures, one on "Prices and Costs in a Free Economy" and one on "Prices and Costs Under Government Regulation."

Transportation Policy On Television Forum

On the Du Mont television network Sunday May 11 at 7 P. M. a Georgetown University forum program will be devoted to the subject: "Our National Transportation Mess—and What Conflicting Government Policies Are Costing the Public." The program will be transcribed and rebroadcast by many radio stations, including those of the Liberty network. Participants in the forum discussion will be Senator Bricker, Republican of Ohio, William White, president of the Delaware, Lackawanna & Western, Herschel Newsom, master of the National Grange, and Charles Dearing of the Brookings Institution.

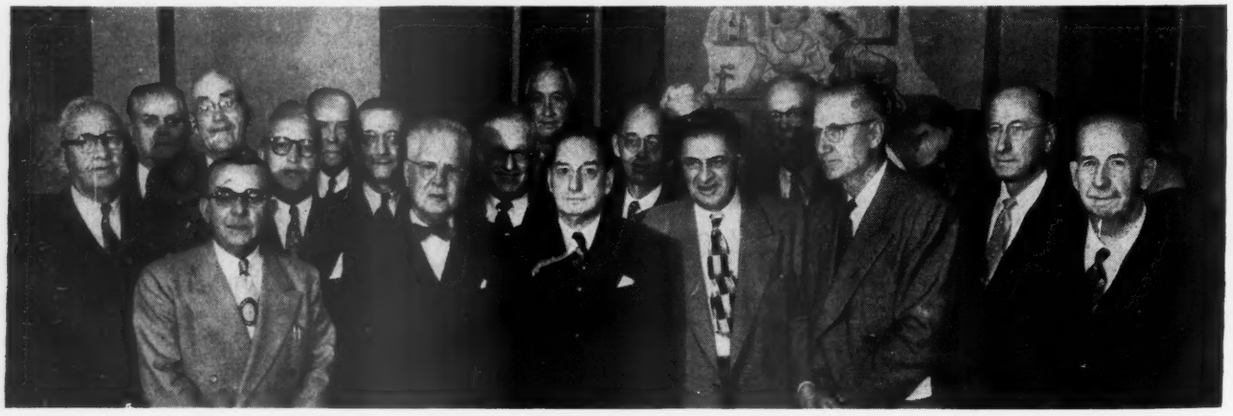
Railroads Would End "Non-Sked" Air Services

The railroads have petitioned the Civil Aeronautics Board for permission to intervene in an investigation of the exemption of non-scheduled air lines from economic regulation. The C.A.B. hearing has been set for August 11.

There is no need for air transportation services now being conducted by large irregular carriers and irregular transport carriers in addition to services performed by certificated air lines and railroads, the petition said. Continuance of operations by these irregular air carriers is inconsistent with sound economic conditions in transportation, it added.

Asserting that the hearing scheduled before the C.A.B. "involves issues of grave importance to the entire transportation industry," the petition said railroads believe the proceeding "may determine in a substantial measure the extent to which sound economic conditions in air transportation will prevail in the future." The development of national transportation facilities adequate to meet needs of the commerce and defense of the United States requires that railroads, as well as other carriers providing regular service, shall be protected from diversion of traffic by unscheduled carriers which have "discriminatory economic advantages," the petition also said.

Continuance of operating authorizations to carriers possessing such "unfair advantages" will result in an in-



THEY HELPED LAUNCH THE FIRST SHIPPERS ADVISORY BOARD. These members and railroad men were present at the first meeting of the Northwest Shippers Advisory Board—the first of the present 13 boards to be organized —29 years ago. They were honored guests at a special luncheon honoring the board's 100th regular meeting.

creasing "uneconomic" diversion of traffic from railroads which will threaten their ability to provide transportation service required in the public interest, the petition declared. Railroads have invested vast amounts of capital in transportation facilities which serve every part of the country, which are a necessity for commerce and national defense and which require expenditures of large sums annually for adequate maintenance, it continued. The C.A.B.'s determination of the issues regarding exemption of irregular air carriers from regulation will have a direct and substantial effect upon the railroads' ability to maintain their facilities and services, the petition concluded.

Upper New England Group Discusses Loss and Damage

The importance of loss-and-damage prevention to the nation's economy was discussed at the 13th annual perfect shipping dinner of the Maine-New Hampshire section of the New England Shippers Advisory Board in Saco, Me., on April 28. Raymond E. Snider, traffic manager of the Gilbert & Barker Manufacturing Co. and chairman of the board's loss and damage prevention committee, called on shippers to increase their efforts for better shipping, and on railroads to continue to press for better handling of cars in road and terminal movement.

The mutual responsibility of shippers and receivers to train and educate personnel in all phases of shipping and handling freight was emphasized by Frank W. Rourke, vice-president of the Boston & Maine and Maine Central. William H. Day, manager of the transportation department of the Boston Chamber of Commerce and chairman of the advisory board, pointed out that the cost of railroad loss and damage is borne by railroads but must necessarily be passed on to buyers of railroad transportation in railroad freight rates. Mr. Day said there is need for New England representation on the Interstate Commerce Commission and urged that states in the region form a common front to back a candidate for a post on the commission.

Transport Training Planned for North Ohio

Development o a college-level training program in transportation to produce traffic technicians for northern Ohio industry was announced recently in Cleveland. The program is being sponsored by John Carroll University and railroad, trucking, marine and traffic representatives. A 19-man committee, to be known as the transportation advisory council of John Carroll, will act as liaison between practical aspects of the transportation industry and classroom theories of the university's school of business, economics and government and its military science department of transportation.

Projects earmarked for early attention include development and maintenance of a modern transportation library on the university's campus, provision of facilities for student laboratory work and field excursions, assignment by industries of men and material for campus lectures, and arrangements for students to obtain on-the-job experience during regular four-year degree programs.

H. J. Carroll, director of traffic, Goodyear Tire & Rubber Co., is chairman of the committee. S. J. Witt, assistant vice-president, traffic (rates), of the New York, Chicago & St. Louis, is vice-chairman, and W. J. Brennan, president of the Traffic Club of Cleveland, is secretary. Other railroad representatives on the committee are P. W. Johnston, president, Erie; J. Hudson Day, traffic vice-president, Nickel Plate; A. S. Genet, freight traffic vice-president, Chesapeake & Ohio; D. K. Chase, assistant to vice-president of operations, Pennsylvania; J. T. Lean, general freight agent, Baltimore & Ohio; and C. F. Wiegele, general manger, Lines West, New York Central.

For use in classroom work in transportation, the Erie has presented to John Carroll University three model freight cars—box, gondola and flat. The cars, scaled 1½ inches to one foot, are exact replicas of regular cars, except for the air brake assembly. They will be used for study of nomenclature, designation, markings and methods of proper loading. Shown above at the presentation are John F. McMullen, superintendent of the Erie's car department, which built the cars; the Very Rev. Frederick E. Welfle,, S.J., president of John Carroll University; Harry J. Carroll, director of traffic, Goodyear Tire & Rubber Co., Akron; and Lt. Col. H. I. Schmitt, commanding officer of the university's Reserve Officers Training Corps transportation unit.

Rules for Self-Propelled Cars Proposed by I.C.C.

The Interstate Commerce Commission has issued a set of proposed rules and instructions for inspection and testing of multiple-operated electric locomotive units.

An accompanying notice from Commissioner Patterson said he and other representatives of the commission will hold a conference to discuss the proposed rules with railroads and other interested parties at the Union Station Building, Room 220, Chicago, on May 26. The notice also said anyone desiring to discuss the rules at the conference will be expected to submit at the opening session a written list of the rules with respect to which discussion is desired.

The commission drafted the proposed rules after considering presentations submitted by a committee representing the railroads, and criticisms thereof and suggestions submitted by interested labor organizations. The proceeding involved is Ex Parte No. 179, instituted by the commission early in 1951.

Transport Council Elects Hollar To Head Group

The Transporation Council, newly formed advisory group in the Department of Commerce, held its first formal meeting last week and elected Philip A. Hollar, vice-president, American Car & Foundry Co., as chairman.

About 40 transportation executives met with Commerce Department officials April 29. In addition to a chairman, the group elected an 11-man executive committee. Exact membership of the council will be determined upon recommendations of sub-committees at later meetings, the department announced.

Formation of this council was the result of a February 28 meeting of carrier and shipper representatives. They met at the invitation of Commerce Secretary Sawyer and agreed at that time to set up the advisory body. (*Railway Age*, March 10, page 17).

At the meeting last week Secretary Sawyer told the group that Commerce has "no intention" of getting into the

COTTON BELT TRAFFIC MEN—more than 100 of them—gathered in St. Louis on March 31 for a "family meeting" and a three-day tour of the railroad that concluded at Dallas, Tex. In welcoming the group, President H. J. McKenzie called their attention to the Cotton Belt's 1952 gross revenue goal of $75 million, or $1 million for every year of the road's history. He said that 37 diesel locomotive units over and above those now on order would completely dieselize the 1,570-mile system.

Following the meeting the traffic men toured the Florida street freight station (shown above) and Valley Junction (East St. Louis, Ill.) yard. After that, the group visited several larger industrial plants in the area and then boarded a special train for the tour to Dallas. Stops were made along the way each night so that the entire railroad could be traversed by daylight. Upon arrival at Dallas, chartered buses took the traffic men through the Trinity Industrial District and other industrial areas of the city.

regulatory field but said the new council can serve as a "valuable clearing house for the discussion with government of transportation problems." It can be a "focal point" for views on policy matters of national importance, he said.

Representatives of all forms of transportation and users of transportation were present at this meeting, according to a department announcement. Next meeting of the council will be held in September, but the exact time and place has not been determined, the announcement said.

Members of the council's executive committee are as follows:

Milton W. Arnold, vice-president, Air Transport Association.

Frazier A. Bailey, president, National Federation of American Shipping.

J. L. Burke, president, Service Pipe Line Company, Tulsa, Okla.

W. T. Faricy, president, Association of American Railroads.

Kent T. Healy, chairman, Committee on Transportation, Yale University.

Arthur M. Hill, chairman, board of directors, Atlantic Greyhound Corporation, Charleston, W. Va.

John B. Keeler, traffic consultant, Koppers Company, Pittsburgh, Pa.

Giles Morrow, executive secretary, Freight Forwarders Institute.

Walter F. Mullady, president, Decatur Cartage Company, Chicago, and also president of American Trucking Associations.

Earl Smith, vice-president and manager of the transportation department, General Mills, Minneapolis, Minn.

Chester R. Thompson, president, American Waterways Operators.

In an April 29 speech at a transportation luncheon of the Chamber of Commerce of the United States, Secretary Sawyer had this to say about the new Transportation Council:

"I hope this group may also contribute to eliminating some of the duplication of meetings and activities which are now borne by representatives of various areas of transportation and groups of shippers. If it results in a coordinated presentation of transportation problems to the government, it will have amply justified its creation and existence."

Copper Range Strike Settled by Agreement

An agreement between representatives of the Brotherhood of Maintenance of Way Employees and officers of the Copper Range, reached just before issues that have held the road strikebound since March 7 were to be subject to arbitration, has ended the tie-up (*Railway Age*, March 17, page 108). Full operations were restored on April 28.

Tie-up of the railroad was 100 per cent effective because the brotherhood set up picket lines which other employees would not cross. Negotiations had been aired before a government board without success. Both sides were about to sign an arbitration agreement in Washington when the Interstate Commerce Commission announced the additional rate increase under Ex Parte 175. Officers of the road felt this rate increase gave them some "leeway" to conduct further direct negotiations and on April 24 an agreement was reached whereby a 12½-cent hourly wage increase was made retroactive to March 1, 1951, with an additional 10 cents per hour cost of living increase added beginning April 25, 1952.

Freight Car Loadings

Loadings of revenue freight in the week ended April 26 totaled 779,402 cars, the Association of American Railroads announced on May 1. This was an increase of 44,305 cars, or 6 per cent, compared with the previous week; a decrease of 45,260 cars, or 5.5 per cent, compared with the corresponding week last year; and an increase of 34,107 cars, or 4.6 per cent, compared with the equivalent 1950 week.

Loadings of revenue freight for the week ended April 19 totaled 735,097 cars; the summary for that week, compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, April 19

District	1952	1951	1950
Eastern	124,156	142,937	134,288
Allegheny	149,499	168,130	153,834
Pocahontas	55,924	62,860	60,690
Southern	133,120	134,050	127,387
Northwestern	103,611	120,790	75,206
Central Western	110,679	120,766	114,399
Southwestern	58,108	60,489	56,884
Total Western Districts	272,398	302,045	246,489
Total All Roads	735,097	810,022	722,688
Commodities:			
Grain and grain products	40,274	50,295	42,074
Livestock	8,844	8,333	8,573
Coal	128,773	145,193	151,142
Coke	13,794	14,963	14,406
Forest products	44,113	48,241	41,053
Ore	61,589	67,304	16,604
Merchandise l.c.l	71,843	79,868	84,386
Miscellaneous	365,867	395,825	364,450
April 19	735,097	810,022	722,688
April 12	690,660	777,989	707,385
April 5	707,142	739,523	700,049
March 29	725,423	755,435	720,404
March 22	719,921	748,878	717,259
Cumulative total 16 weeks	11,470,966	11,821,492	10,254,127

In Canada: Car loadings for the seven-day period ended April 21 totaled 77,108 cars, compared with 65,207 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
April 21, 1952	77,108	31,027
April 21, 1951	79,879	35,568
Cumulative Totals		
April 21, 1952	1,195,714	571,537
April 21, 1951	1,201,298	580,813

MORE NEWS ON PAGES 95-110

Additional news appears on page 95, with regular news departments beginning on the following pages:

Equipment and Supplies	17
Supply Trade	18
Abandonments	95
Construction	95
Organizations	95
Financial	96
Railway Officers	98

CAR SURPLUSES, SHORTAGES

Average daily freight car surpluses and shortages for the week ended April 26 were announced by the Association of American Railroads on May 1 as follows:

	Surplus	Shortage
Plain Box	3,906	249
Auto Box	340	0
Total Box	4,246	249
Gondola	1,051	537
Hopper	1,648	221
Covered Hopper	82	18
Stock	1,780	46
Flat	12	612
Refrigerator	8,521	0
Other	707	0
Total	18,047	1,683

Kennedy Reappointed To Retirement Board

William J. Kennedy, "public" member and chairman of the Railroad Retirement Board, has been reappointed by President Truman for a new term of five years from August 29. The nomination was sent to the Senate on April 28.

Mr. Kennedy has been a member and chairman of R.R.B. since April 1946, when he succeeded Murray W. Latimer.

White House Resumes Effort in "Op" Disputes

John R. Steelman, assistant to President Truman, has resumed his efforts to settle the long-stalemated wage and rules disputes involving railroad employees who are represented by the Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen & Enginemen, and Order of Railway Conductors.

When this issue went to press, Dr. Steelman was holding separate meetings with the interested union leaders and representatives of management.

Railway Age Receives Annual Safety Award

Railway Age again has received in its field the National Safety Council's non-competitive public interest award for exceptional service to safety. The awards, presented annually, this year went to 20 daily and seven weekly newspapers, 57 radio and nine television stations, five general circulation and 16 specialized magazines, 17 advertisers, three outdoor advertising companies and four organizations in a general classification.

"An ever-growing sense of responsibility and leadership in the fight against accidents is revealed by the nominations for the 1951 public interest award," Ned H. Dearborn, president of the council, said. "There isn't any question but that most publishers, broadcasters and advertisers are accepting accident prevention as one of the great social problems of our time. We are grateful that they are, because only they can make the voice of safety heard."

EQUIPMENT AND SUPPLIES

FREIGHT CARS

The **Norfolk & Western** has ordered 500 50-ton box cars from the Pullman-Standard Car Manufacturing Company for delivery during the last quarter of 1952.

PASSENGER CARS

The **Chicago, Burlington & Quincy** has ordered 10 gallery-type all-stainless steel suburban coaches from the Budd Company.

SIGNALING

The **Chesapeake & Ohio** has ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company material to install new interlocking facilities at Cabin Creek Jct. (Charleston, W. Va.) and South Ruffner, W. Va., with control of the two interlockings consolidated at Cabin Creek Jct., 13.7 miles from South Ruffner. In addition to the 7½-ft. style C control machine, the order includes styles R-2 color-light signals, M-23A dual-control electric switch machines, SL-21-A electric switch locks, switch circuit controllers, relays, rectifiers and housings. Field installation will be done by railway forces.

The **Norfolk & Western** plans to install automatic short-arm gates and flashing-light signals at Yadkin, Va. An order has been placed with the Union Switch & Signal Division of the Westinghouse Air Bake Company for relays, rectifiers, transformers and housings required. Field installation will be handled by railway forces.

LOCOMOTIVES

The **Chicago, Burlington & Quincy** board of directors has authorized purchase of six 2,250-hp. diesel-electric passenger locomotive units for suburban service. The locomotives, plus the gallery-type suburban cars reported ordered elsewhere in these columns, will cost more than $3,000,000. When the six diesel units are delivered, the Burlington's Chicago suburban service will be fully dieselized. The board also authorized purchase of 21 road-switching locomotives. These dual-purpose

Domestic Equipment Orders Reported in April

Domestic orders for 169 diesel-electric locomotive units and 600 freight cars were reported by individual purchasers in *Railway Age* in April. No passenger-train car orders were reported. Estimated cost of the locomotive units is $26,310,000; of the freight cars, $2,819,000. An accompanying table lists the orders in detail.

During the first four months of 1952 *Railway Age* has reported domestic orders by individual purchase for 642 diesel-electric locomotive units costing an estimated $99,373,000; 17,109 freight-train cars costing an estimated $107,395,000; and 131 passenger-train cars costing an estimated $8,833,016.

Locomotives

Purchaser	No.	Type	Issue Reported	Builder
C. & N.W.	2	2,250-hp. "A" Pass.	April 7	Electro-Motive
	4	1,500-hp. "B" Frt.	April 7	Electro-Motive
	50*	1,500-hp. Rd.-Sw.	April 7	Electro-Motive
	5	1,200-hp. Switching	April 7	Electro-Motive
	1	800-hp. Switching	April 7	Electro-Motive
	8	1,600-hp. Rd.-Sw.	April 7	Fairbanks, Morse
	4	1,200-hp. Switching	April 7	Fairbanks, Morse
	11**	1,600-hp. Rd.-Sw.	April 7	American-G.E.
	4	1,200-hp. Switching	April 7	Baldwin-Lima-Hamilton
	1	1,600-hp. Rd.-Sw.	April 7	Baldwin-Lima-Hamilton
Georgia	1	1,500-hp. Gen. Purpose	April 7	Electro-Motive
L. & N.	2	1,600-hp. "A" Frt.	April 28	American-G.E.
	7	1,600-hp. "B" Frt.	April 28	American-G.E.
	12	1,600-hp. Rd.-Sw.	April 28	American-G.E.
	16	1,000-hp. Switching	April 28	American-G.E.
	15	1,500-hp. Gen. Purpose	April 28	Electro-Motive
	3	1,200-hp. Switching	April 28	Electro-Motive
M.-K.-T.	5	1,200-hp. Switching	April 7	Baldwin-Lima-Hamilton
	4	1,600-hp. Rd.-Sw.	April 7	Baldwin-Lima-Hamilton
	6	1,500-hp. Rd.-Sw.	April 7	Electro-Motive
N.C. & St.L.	3	1,500-hp. Gen. Purpose	April 28	Electro-Motive
N.S.	5	1,600-hp. Freight	April 28	Baldwin-Lima-Hamilton

* Including two for the Chicago, St. Paul, Minneapolis & Omaha.
** Including three for the C. St. P. M. & O.

Freight Cars

St. Louis Refrigerator Car Co.	200	40-ton Refrigerator	April 7	Pressed Steel Car
S.A.L.	400	50-ton Gondola	April 21	R.R. Shops

units will cost over $4,000,000 and will be used on both main and branch lines and in yard service.

The **Gulf, Mobile & Ohio** has ordered two 1,600-hp. diesel-electric road-switching locomotive units from the American Locomotive-General Electric Companies. Delivery is scheduled for next August.

SUPPLY TRADE

Kenneth I. Thompson has been appointed vice-president—sales of the **Oxweld Railroad Service Company,** a division of the **Union Carbide & Carbon Corp.** Mr. Thompson entered the industrial equipment business in 1921 with the Pennsylvania

Kenneth I. Thompson

Pump & Compressor Co. and later worked for the Lehigh-Fuller Company. In 1937 Mr. Thompson was associated with Ingersoll-Rand and in 1945 he joined Oxweld Railroad Service as eastern sales manager. He was named general manager in 1950, with headquarters in Chicago.

Richard T. Shanahan, sales manager for **Mangosteel Products,** has been appointed sales manager at the newly opened Chicago office of **Hanlon & Wilson Co.,** of Pittsburgh. **H. P. Player,** mechanical inspector for the **Pullman Company,** has been appointed the midwest representative of **Mangosteel.**

C. Louis Freeze has been appointed district sales representative in Delaware, eastern Pennsylvania and southern New Jersey for the Electrode Division of the **McKay Company.**

Douglas J. Baillie, formerly with the Canadian Appliance Company, has formed a new sales organization—the **Canadian Railway Products Company**—with offices in room 912, Dominion Square Building, Montreal. Mr.

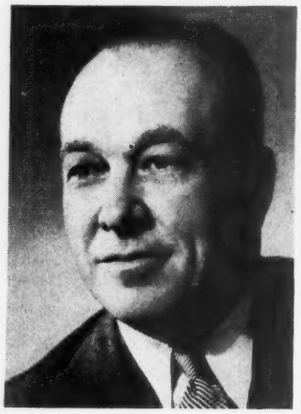
Arthur M. Bixby, whose election as vice-president of the Waugh Equipment Company was reported in last week's Railway Age. Mr. Bixby was a special mechanical apprentice with the New York, New Haven & Hartford in 1925-28 and subsequently worked in the test department; as assistant to mechanical engineer; and as mechanical assistant in the research department. He joined Waugh Equipment in 1939 as a service engineer.

Baillie recently was appointed agent for W. H. Miner, Inc., of Chicago, to sell their products in Canada.

James V. Towne has been appointed assistant to the vice-president, **Vanadium Corporation of America.**

The **L. B. Foster Company** has appointed **R. A. Anderson** as regional manager for the southwest, with offices in Houston, Tex. Mr. Anderson replaces the late **J. B. Strauss.**

The **American Locomotive Company** has announced the opening of a new sales office in Richmond, Va., for



Charles H. Hobbs, whose appointment as manager of railroad sales of the Pyle-National Company at Chicago, was announced in *Railway Age* April 28, page 57.

GENERAL RAILWAY SIGNAL NAMES NEW PRESIDENT

Paul Renshaw has been elected chairman of the board of General Railway Signal Company, a newly created position. He has been succeeded as president by Herbert W. Chamberlain, who has been executive vice-president since January 1, 1950. Arthur E. Heimbach, vice-president in charge of sales, has been elected a director.

its Railway Steel Spring Division, and appointment of **E. J. Brown,** in charge of the new office, as assistant to Vice-president **W. A. Callison.** The office is at 219 East Broad street.

Herbert R. Northrup, formerly labor economist with the National Industrial Conference Board and consultant to the Salary Stabilization Board, has opened new offices for labor relations consultation at 11 West 42nd street, New York 18.

The **American Pulley Company** has purchased the designs, patents and facilities of the **Keen Manufacturing Company,** Harlingen, Tex., manufacturer of specialized materials-handling equipment. American Pulley will continue the manufacture of certain models of the Keen line of equipment under its own trade name. Keen's Harlingen plant has been closed.

Paul H. Darges has been appointed traffic manager of the **Rust Engineering Company** to succeed the late **Frederick R. Cunliffe.** Mr. Darges had been assistant traffic manager since he joined the firm in 1947.

The **Sneed Sales Company** has been appointed exclusive sales representative in the southwest for the **American-Fort Pitt Spring Division** of **H. K. Porter Company.** Sneed Sales, which will service accounts in Texas, Oklahoma, Arkansas and New Mexico, is located at 401 North Haskell avenue, Dallas 1, Tex.

John N. Lind has been appointed general traffic manager of the **National Supply Company** to succeed **Martin C. Richards,** who has retired after more than 32 years' service. Mr. Lind is vice-president of the National Association of Shippers Advisory Boards and is general chairman of the Allegheny Regional Advisory Board.

T. H. Parke, former assistant vice-president in charge of the New York office of the **Scullin Steel Company,** has been promoted to vice-president. W. H. Coburn, former assistant comptroller, has been appointed comptroller.

Edward J. Butler has been elected president of the **McDougall-Butler Company** to succeed his father, the

(Continued on page 95)

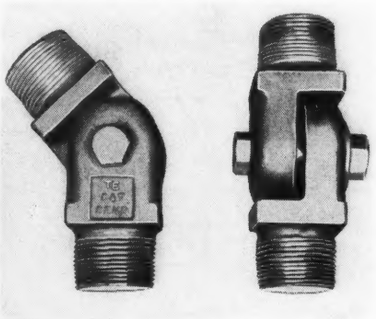
NEW and IMPROVED PRODUCTS of the MANUFACTURERS

Two models of battery-powered crane trucks which are equipped with 19 ft. telescoping booms are available from the Baker Industrial Truck Division of the Baker-Raulang Company, Cleveland. Model CXB has a rated capacity of 6,000 lb. at a 7 ft. radius, while the type CXF's capacity is 10,000 lb. at a 5½ ft. radius.

Diesel Control Circuit Jumpers

Control jumpers for diesel-electric locomotives are now being made by the Pyle-National Company, Chicago. They consist of a 250-volt multi-conductor cable and two plug heads molded in Hycar, a product of the B. F. Goodrich Chemical Company. The cable and plug heads are vulcanized together to form a one-piece unit, which sometimes incorporates as many as 27 circuits. The plugs, each 5 3/16 in. in diameter and 9⅞ in. long, are shaped to permit a comfortable hand grip and are designed to absorb the flexing strain imposed on the cable during operation.

Rough handling and dragging on the railroad bed when disconnected make it necessary to use a durable material to protect the plug head contacts. Besides having good abrasion resistance, Hycar resists the damaging effects of coal dust, salt-water spray, greases, most acids, human waste, and is not affected by weather or extreme temperature changes.

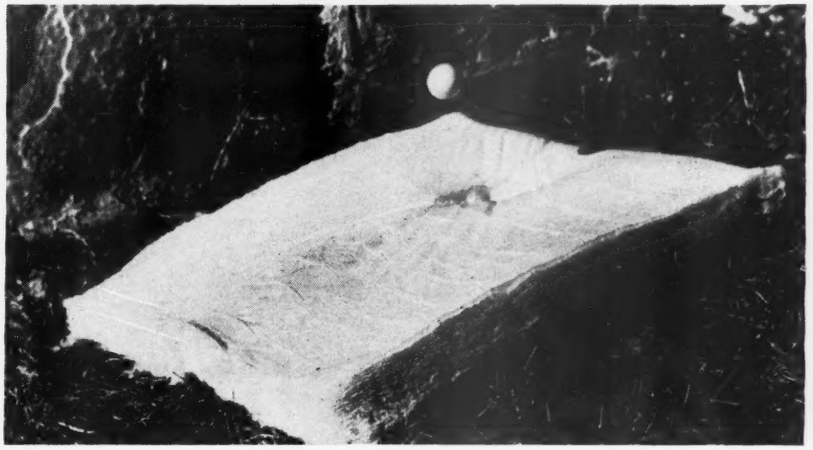


Adjustable Angle Suspension Fitting

The Thompson Electric Company, Cleveland, has announced a new adjustable angle fitting which permits accurate vertical suspension of overhead type electrical equipment from sloping or arched roof members. This unit features 90-deg. adjustment and also permits angle mountings from wall posts or columns. Originally developed for use with Thompson disconnecting-lowering lighting fixture hangers, it can be used to suspend other types of lighting units, loud speakers, unit heaters, overhead fans, blowers, motor platforms and other electrical equipment weighing up to 1,500 lb. When utilized with floodlights, this fitting facilitates balancing in any vertical or radial position so that lights can be focused independently.

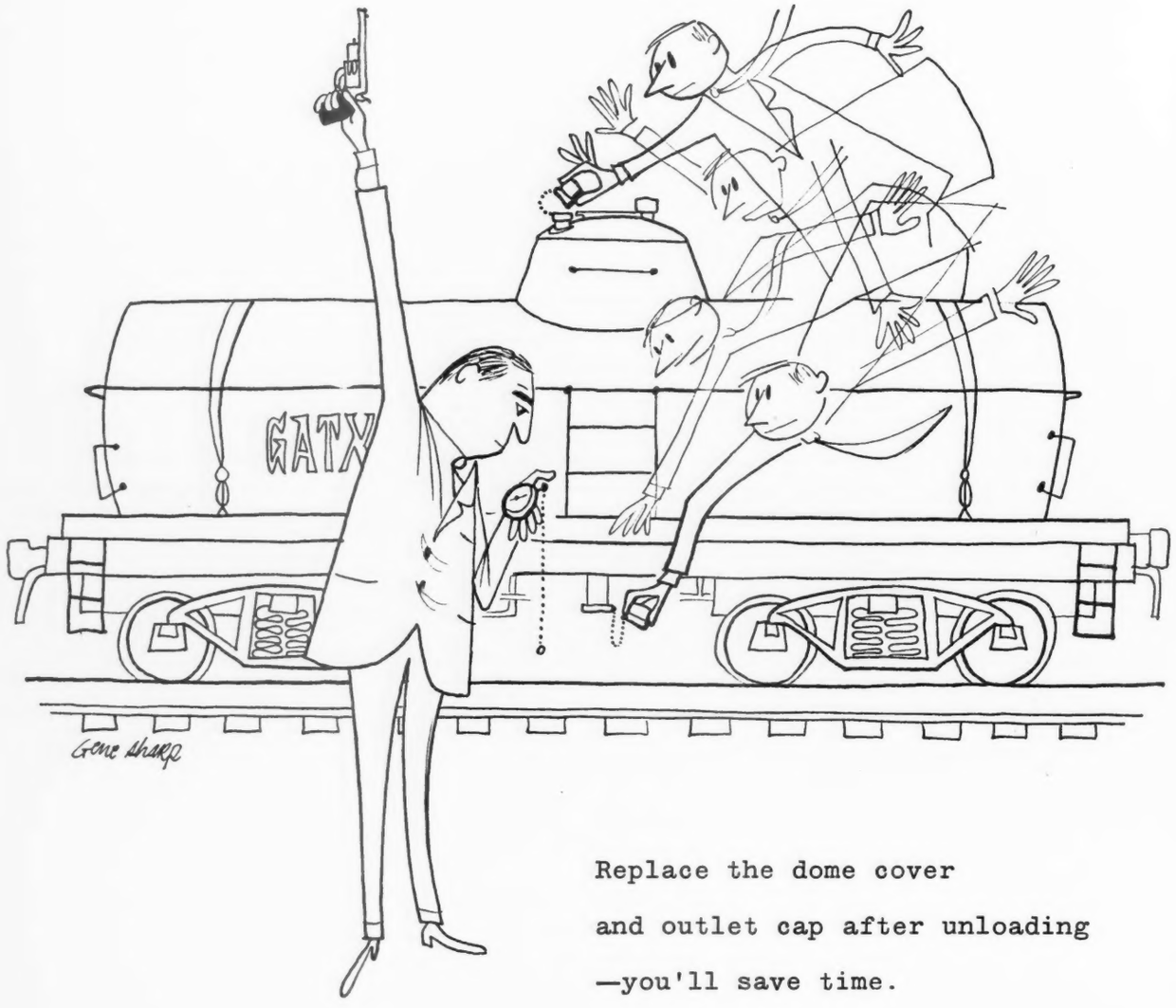
The adjustable angle fitting is fabricated of high-strength heat-treated aluminum alloy with machined conical seats for hard, radial knurled, double-cone plugs which join the halves. The parts are keyed into position after adjustment by tightening the draw bolt. When set, the fitting will hold its position up to the maximum load capacity of the component parts.

The fitting is available in three types. The light-duty model has ¾-in. male pipe threads and is designed for units weighing under 60 lb.; the medium-duty fitting with 1-in. male pipe threads handles loads from 60 to 100 lb.; and the heavy-duty model with 1¼-in. male pipe threads is capable of suspending equipment weighing up to 1,500 lb.



"Celluliner" is a new packing material made of creped wadding. The manufacturer, Gilman Brothers Co. of Gilman, Conn., says that an egg dropped 25 ft. onto a piece of the material bounces but does not break. Celluliner, it is stated, can be made flameproof, moistureproof or highly absorbent, and is available with outer coverings of paper, tissue, cloth or plastic.

THE CARE AND NURSING OF TANK CARS



Replace the dome cover
and outlet cap after unloading
—you'll save time.

Another way to get more from your GATX tank cars

GATX GENERAL AMERICAN TRADE MARK

GENERAL AMERICAN TRANSPORTATION CORPORATION
135 South La Salle Street • Chicago 90, Illinois

District Offices: Buffalo • Cleveland • Dallas • Houston • Los Angeles • New Orleans
New York • Pittsburgh • St. Louis • San Francisco • Seattle • Tulsa • Washington
Export Dept.: 10 East 49th Street, New York 17, New York

So many people have requested reprints of these cartoon advertisements that we are making them available to you for use in your shops. Just write us.

SHIPPERS AND THE PASSENGER DEFICIT

Like the farmer's conception of a giraffe, the notorious passenger deficit is "no sich animal" as a lot of people try to make it out. This reported deficit is being used for purposes entirely alien to those it was devised to serve.

Some shippers—like the National Coal Association—who would like to prove that their own freight rates are too high claim that they are saddled unjustly with a share of the deficit. Those government bureaus—notably the Department of Agriculture—which persistently oppose all railroad freight rate increases have seized on the deficit to demonstrate that the railroads would (unlike everybody else in the country) be practically immune from inflation of their costs if only they would learn how to manage their properties efficiently. The Interstate Commerce Commission itself chides the railroads for seeking rate increases with which to keep up with the national price level while they continue to suffer a passenger "deficit."

As a final irony, representatives of state utility commissions—which, more than any other factor, are responsible for passenger losses because of their reluctance to allow service withdrawals of any kind—have, in appearances in recent years before the I.C.C. to oppose railroad freight rate increases, used the national passenger deficit as a reason why the railroads should be denied increases in freight rates. One of the state commissions—even slower than most about letting the railroads rid themselves of hopeless "lemons"—actually used the "deficit" as an excuse not to allow intrastate increases in freight charges comparable with those long since allowed by the I.C.C. for interstate application.

The competitors of the railroads find in this alleged "deficit" a convenient cloak for their own infirmities. They might well be pleased that their rail rivals are not making out so well in the carriage of passengers for profit.

Instead, the trucking industry went before the so-called Myers committee of the Senate and leaned heavily on passenger losses as an explanation for the railroads' distress, seeking to make it take the blame actually ascribable to the inequities of government subsidy and regulation which syphon freight traffic from the rails to the highways. The admittedly heavily subsidized air carriers—or their business press—scold the railroads for subsidizing their own passenger business by taking money from their freight customers. In so complaining, the boys of the wild blue yonder fail to make any distinction between taxpayers' dollars injected into air transportation and the more or less arbitrary assignment of joint costs which is the principal explanation for the railroads' passenger deficit. Also, we detect no eagerness on their part to assume *all* of this burdensome load of passenger traffic from the railroads. All they want is the concentrated, higher-rate, long haul moves which happen somehow to be that portion of passenger traffic which is profitable to the railroads too.

These Facts Need Repeating

For the education of those interests which have embraced the railroads' passenger deficit for their own ends, as well as members of the public who are sincerely concerned about passenger losses, certain facts need repetition:

(1) The "deficit" is the result of an expense separation formula. It is designed merely to reflect, according to railroad testimony before the Myers committee, "a fair distribution of total operating expenses between

freight and passenger service; it is not intended to show, nor does it show, what the expense of either one of the two services would be in complete absence of the other." Under the formula strange things happen. During a coal strike, an eastern line curtailed freight train mileage drastically. Since the I.C.C. formula leans heavily upon train-miles in allocating joint expenses, indirect expenses charged against this road's passenger service shot up severalfold, although passenger train- and car-miles actually decreased during the period.

(2) Elimination of passenger service would lose more in total revenues than it would save in direct expenses and would have a more adverse effect on freight rates than the present "deficit." Revenues from passengers and allied services in 1950 were $1,394 million. Operating expenses related solely to these services amounted to $1,257.7 million. Thus the railroads obtained $136.3 million in net operating revenue which they would have had to get from freight customers in the absence of passenger service.

(3) Elimination of passenger service would throw upon the freight service large joint expenses now borne by passenger service. In 1950 the portion of joint expenses charged against passenger operations amounted to $470.9 million.

(4) Individual trains make money and individual trains lose it. It is utterly unrealistic to damn the passenger business as a whole until the railroads are allowed to take off trains that cost more to run than they bring in in revenue, i.e., trains operated at a "cash" loss. State commissioners, chambers of commerce and shippers, please take notice.

(5) A substantial portion of the "passenger deficit" —76 per cent in 1947, 67 per cent in 1948—actually results from the carriage of mail, express and items in baggage service which has nothing to do with the movement of people at all, but are a variant movement of freight. The losses therefrom cannot be eliminated by doing things to the movement of *passengers*. They are a mutual problem of shippers, the railroads and the parcel-toting government.

(6) The railroads are hard at work whittling down controllable items of passenger cost. Dining car losses, for example, are undergoing scrutiny and experimentation with brand new techniques, as never before. The train-mile is the most significant unit of railroad passenger operating costs. The record shows a 35 per cent cut in passenger train-miles operated in 1951, compared with 1930, while traffic handled was 29 per cent greater.

Judicious Action—Not Hysteria

On May 19, this magazine will publish its annual "Passenger Traffic Issue." It will review the steps the railroads have taken to reduce costs and to better service —through new tools and new methods. These will whittle down the "deficit" from one end. It will also demonstrate to railroad men, in all departments (including several thousand ticket agents who actually sell the public), the things the railroads have to merchandise which will increase their volume of patronage. This will whittle down the deficit from the other end. Judicious steps like these, rather than indiscriminate hysteria about a fictitious "deficit," will turn the passenger business into a healthy business to help freight shippers support the railroad plant they require.

TWO REQUIREMENTS OF A CAR-BUILDING PROGRAM

The revised freight-car building program proposed by the Defense Transport Administration as a result of a study of the number of freight cars required for full military mobilization contemplates the building of 11,000 cars per month during the 21 months from next October 1 to the end of June 1954, and 11,875 cars per month in the year thereafter. This proposal is based on the belief that, should there be an all-out emergency, there will not be sufficient steel available then to build up the necessary inventory of railroad rolling stock. In other words, the time to prepare is before, and not after, the event.

Two things are required to make any freight-car building program possible. One is an adequate supply of material. This was lacking for the 10,000-car monthly program throughout 1951. The other is a backlog of car orders large enough to smooth out the effect of variations in the number of orders in the hands of the builders. As the backlog decreases, plants not favored with many orders will have to curtail their production while there is still a substantial backlog on the books of the more favored plants.

Now that there seem to be prospects for more steel for freight-car building, a look at the backlog of freight-car orders is pertinent. During the first six months of 1951 orders for freight cars came in at an average monthly rate of almost 12,000. Deliveries during the same period averaged 7,650 a month. The backlog of unfilled orders at the end of January was just over 146,000; it reached 161,000 at the end of March, and ended the period at 150,000.

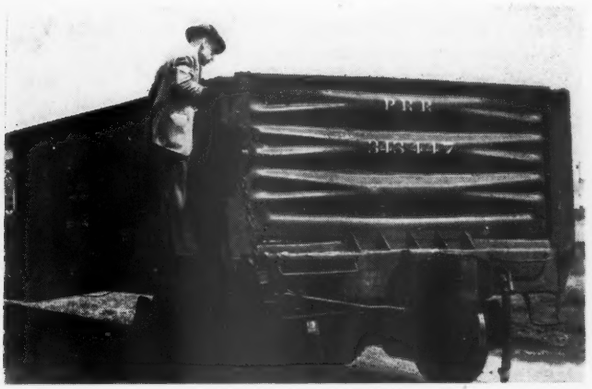
During the last six months of 1951 orders averaged nearly 4,600 cars a month, while deliveries increased to an average of over 8,200 a month. By the end of last year the backlog had declined to less than 127,000 cars. During the first three months of 1952 orders have averaged about 5,700 a month, while deliveries have run at about 8,000 a month. At the end of March the backlog had declined to under 116,000 cars.

The railroads still need more cars. They have now received their full rate increase. The demand for steel is easing. The conclusion seems obvious.

In many cities, and most towns or boroughs, the local agent is the top ranking representative of his railroad. Agent Shuman, in his modest freight office at Waynesboro, Pa., personifies the Pennsylvania Railroad in that community.

The freight station at Waynesboro is typical of most such facilities in towns of like size. At the freighthouse doors are merchandise cars which were spotted on the previous evening by the local freight train.

Agent Shuman tacks a blue and red card on a ferry car so that yard forces can readily identify it as an l.c.l. merchandise car. The origin, destination, and date of shipment are filled in to prevent delay at yards in case the billing is not received with, or in advance of, the car.



Before the sun is all the way up, Mr. Shuman has completed his track check. By knowing the location and the condition of all cars in his area, and whether they are loaded, partially loaded or empty, he is able to control distribution locally—an important contribution to the overall car supply.

MISTER P. R. R. At Waynesboro, Pa.

Local agents, at stations all over the continent, provide an effective contact between the railroads and their customers

James J. Shuman represents just 1/138,000th of all of the Pennsylvania Railroad's personnel, but to the citizens of Waynesboro, in Franklin county, Pa., he *is* the P.R.R. *Railway Age* didn't single out Agent Shuman because he is an exception; on the contrary, he was selected because he typifies the agents at thousands of small and medium stations. The service he performs for the railroad, the shippers and the community is not unlike that provided by perhaps 20 to 25 thousand other agents who run the railroads' business at the local level in cities, towns and hamlets from Bonavista, Newfoundland, to National City, Cal.; from Homestead, Fla., to Prince Rupert, B.C.

Waynesboro, with a population just over 10,000, is situated at the stub end of a 20-mile freight-only branch running off from the Pennsylvania's Cumberland Valley branch at Chambersburg. A local train operates early each weekday evening, and provides close connections with through freight trains in each direction at Chambersburg.

"Jim" Shuman, as the Waynesboro-ites know him, is on the job bright and early every day, Mondays through Fridays. So is Shannon McFerren, warehouseman, who

opens the freighthouse and busies himself unloading the daily merchandise car and spotting freight for the contract delivery man, or for consignees who call for their own shipments. One of Jim's first jobs is to make a check of cars on track on the sidings at the south end of town. Returning to the office, he checks waybills and makes a record of cars that have been placed by the local the evening before, or held over. Freight bills are readied for the local delivery man, and for consignees who provide their own drayage. When these duties are completed —and between phone calls—Mr. Shuman balances his accounts. "The auditors can come in anytime," he states with pride.

A Typical Day

One of the local industries phones in to report that they have a note from the local conductor advising that a switch on their side track should have attention, so Mr. Shuman goes to work for the maintenance-of-way department. Through a call to D. P. Russell, agent at neighboring Mont Alto station, the track gang is located. By midafternoon, two men had come over to Waynesboro and put the switch in order to be used that night.

On the particular day that the *Railway Age* reporter visited Waynesboro, Mr. Shuman hurried down to the Anthony Wayne hotel for a luncheon with the Business Expansion Committee of the local Chamber of Commerce. Here his knowledge of transportation problems and freight service makes him an invaluable member. His report to the secretary includes advice that his survey of transportation, for inclusion in a pamphlet to attract new industries to Waynesboro, is ready for presentation.

Back at the office, he totals the day's receipts and leaves again for the bank to make his deposit, bringing back a check for forwarding to the auditor of freight traffic at Philadelphia. Late afternoon finds him busy, hot after shippers to make sure they are going to use the empties they have on hand. If they are not, he sometimes "borrows" the cars for some other customers who have shipments ready to load. Later on a little detective work reveals the destination of a shipment of bed rails received without billing and with the address mutilated. Before closing these are loaded in the outbound car for a department store in Carlisle, properly marked and accompanied by a free-astray billing.

The principal function of the day is the preparation of the drill order for the conductor who will be in on the local after supper.

Car Supply Expediter

Besides the routine, which includes tracing cars and quoting rates, there are many "extra-curricular" duties which make every day a busy one. Jim feels that he can make an important contribution to the overall car supply by careful observance of the car service rules and Interstate Commerce Commission service orders. His drill order is scrutinized to see that foreign cars are switched to shippers who have freight moving to, or in the direction of, the home roads. A D. & R.G.W. box car gets a shipment from Pueblo, Colo., and an Illinois Central flat is loaded with freight for Chicago. One shipper, holding out for a double-door box car for loading machinery, is persuaded to accept one of the newer eight-foot single door cars which is available and happens to be of the same ownership as the road to which the shipment is destined. A double-door car, also on hand, had it been used, would have been moved directly away from the owning line.

Jim Shuman is actively looking for more freight, too. When he has, for example, a 6,000-lb. shipment for Chicago, he gets busy on the phone calling other shippers to tell them it looks like he can make a Chicago car, and to see if they have anything moving to, or via, that point. They promptly arrange to favor him with Chicago freight if they can, for they are thus assured of a fast move without transfers—and the original shipment enjoys the same advantage. Handling costs are reduced, too. A traffic manager at one of the large industries told this reporter that this is an extra service which he especially appreciates, and which is responsible for diverting a lot of less-carload freight from the highways.

Between chores related directly to freight service, Mr. Shuman is likely to handle a Florida passenger reservation out of Harrisburg or Baltimore for some shipper, a sideline which wins his road a lot of friends. For the freight traffic department, he is active passing tips on local affairs—such as information on local construction jobs in the town—which might lead to development of addition freight tonnage and revenue. From time to time he originates applications for commodity rates, usually directed toward securing truck-competitive traffic.

Mr. Shuman works closely with the division supervisor of loss and damage prevention. Currently he is trying to persuade local shippers of heavy machinery to use antiskid plates, with wedge blocks, a method of loading which promises to offer shippers a two-thirds saving over conventional blocking procedures. In addition, damage should be minimized.

Public Relations Representative

What else? Well, the local agent is local public relations man for the railroad, too. He handles publicity releases personally with the editor of the local paper. He recently pacified a housewife who complained that the steam engine which was substituting for the regular diesel was dirtying her wash, and tactfully corrected the situation by calling it to the attention of his friends who make up the crew of the local. When Waynesboro faced a water shortage last summer, following an extraordinary drought, the borough master came to "Mr. P.R.R. at Waynesboro" to urge repairs to the standby water tank which reportedly had a small leak. The railroad went them one better; the tank was temporarily shut off altogether since the diesel was currently handling the local.

Ask Jim Shuman what he would like most to help him do a good job better, and his answer is—"Something to put contract motor trucking on a level where the rail carriers would have a fair chance to compete for the traffic."* What else would help him compete with the truckers? An amendment to the Elkins Act—perhaps to make the same credit provisions applicable in equal force to the trucking companies—so that he would not have to require the railroad's customers to pay up every 96 hours, while they wait 30 days to settle their freight charges with a single monthly payment to the highway competitors.

Smoky engines or borough water supply, industrial development or damage prevention, public relations or travel vacation itineraries—in addition to the primary problems of transportation of freight—all these and many other duties fall to the local agents, like Jim Shuman, who represent the railroads in virtually every community, bringing the corporation within a local phone call of every shipper, every prospective customer and every citizen.

*A bill (S.2752) designed to end the contract carriers' "preferred status" was introduced in the Senate by Ohio's Senator Bricker on February 27, 1952.

Conveyor trucks are attached to the chain as rapidly as they are loaded. The outbound "spot" number is clearly chalked either on the packages or on the chalk board on the front of the truck.

The caller pushes the button on his talk-back speaker to get the attention of the checker in the office. The checker then opens the circuit and tells the caller to go ahead. The caller need not go near the speaker to talk.

A New Freighthouse For Faster, More Economical Service

Rock Island's new Kansas City installation features conveyor tow system, "talk-back" telephone checking, wide unobstructed working areas, plus new centralized divisional offices

The recent opening of the Chicago, Rock Island & Pacific's $600,000 freight transfer terminal and office building in the Armourdale district of Kansas City, Kan., is making possible substantial improvements in the handling of l.c.l. traffic moving to, through and from the Kansas City area, as well as effecting desirable operating economies. The "office building" which has been incorporated in the new structure has enabled consolidation of district operating, communications, and traffic offices formerly scattered about the city—in high rental areas and inadequate quarters.

SPHERE OF USE . . .

Kansas City is the "hub" of the Rock Island system—a principal transfer point where through merchandise cars are made and broken—as well as being an important station in its own right. The opening of a modern, efficient new facility at this point is resulting in improved l.c.l. servce throughout the system. It not only is making possible faster service but is doing so at a lower cost.

The new building serves four separate functions:

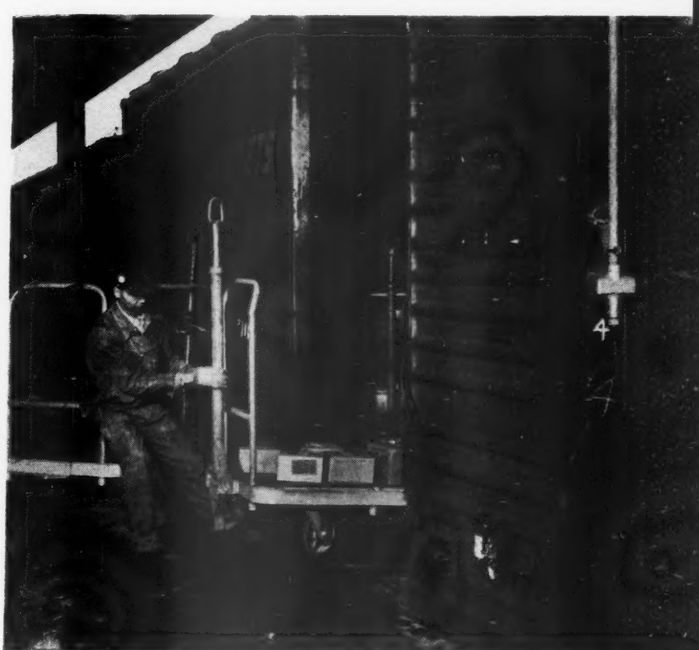
(1) As a completely modern freighthouse and transfer facility for the Rock Island Motor Transit Company —the railroad's highway subsidiary;

(2) As a freighthouse servicing Kansas City and vicinity;

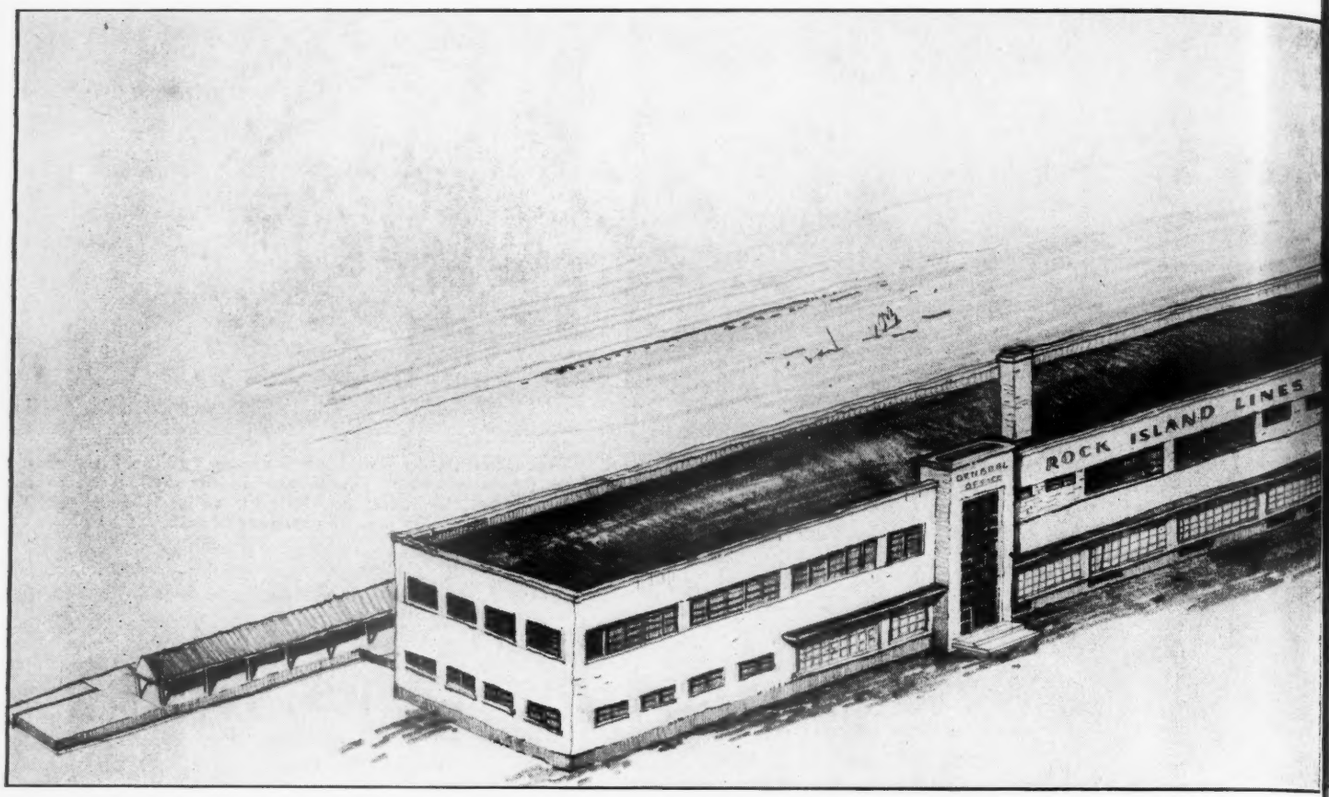
(3) As a major rail-to-rail and truck-rail transfer terminal;

(4) As a new "office building" close to the divisional operating center at Armourdale yard.

The new freighthouse is near Fifth and Scott streets

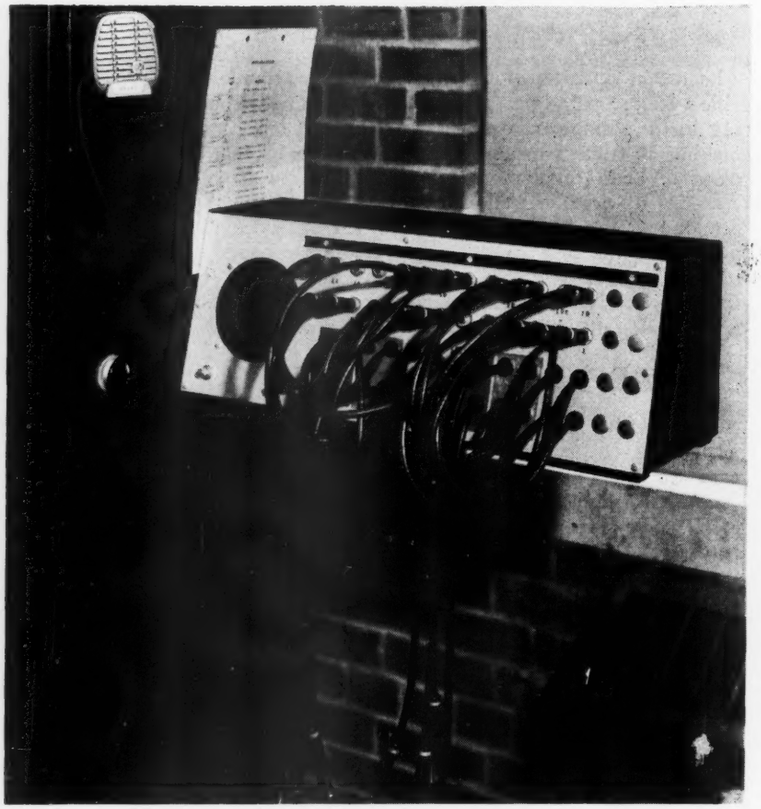


The centralized checking system expedites the loading and dispatch of platform trucks on the conveyor system. A receptacle, wired to the central checking office, is placed near every loading or unloading spot. At places where two cars are spotted at once, two receptacles are provided.

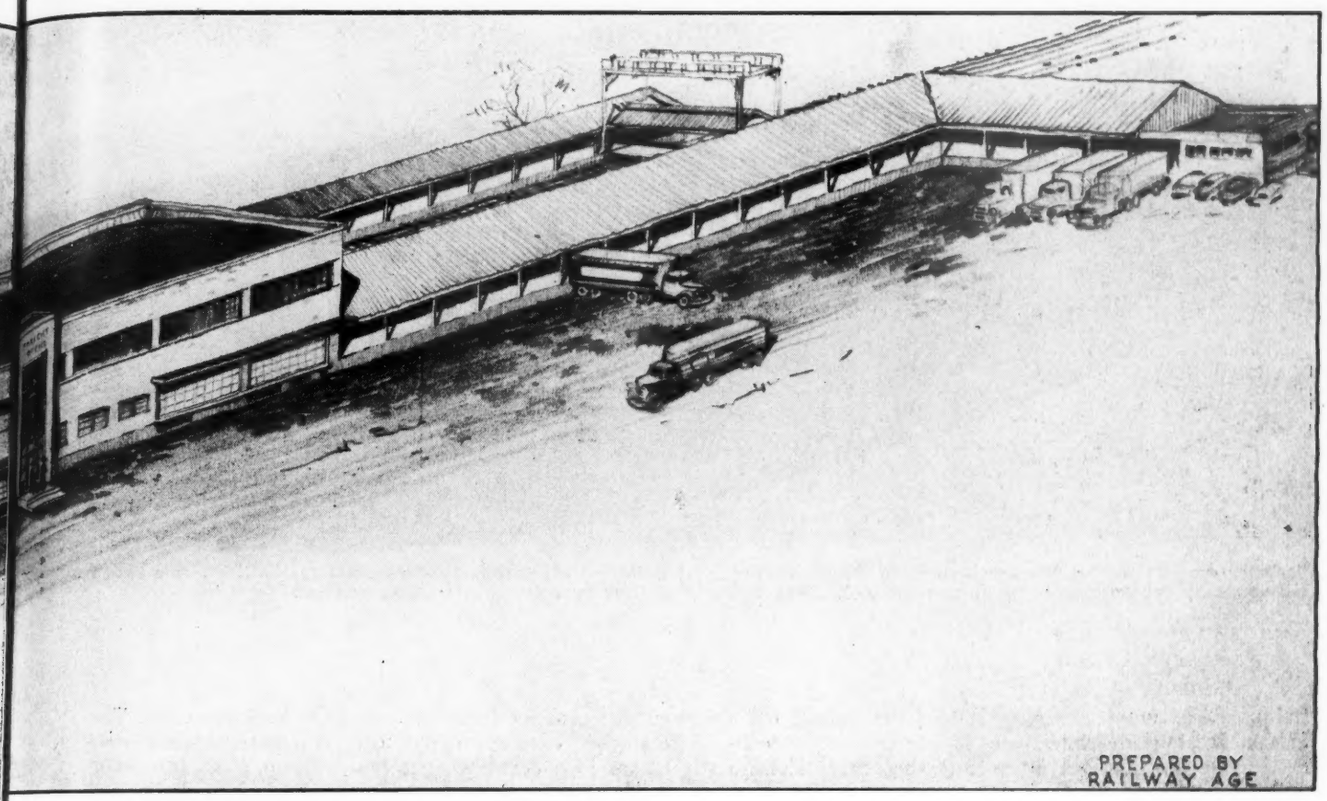


An artist's conception of the Rock Island's

The conveyor chain is so constructed that it can be easily disconnected at the ends of the lift bridge by two men, working without tools.



The plug-in switchboard in the central checking office. Four plugs are connected to each console, and each jack represents a speaker receptacle on the dock. Using this board, each checker may connect his console with any combination of working positions on the dock.



new Armourdale freighthouse at Kansas City, Kan.

in the Armourdale district of Kansas City, Kan., and is immediately adjacent to the south end of the Armourdale classification yard.

THE BUILDING . . .

The new two-story brick structure incorporates a smaller freight terminal built in 1946 for use by the Rock Island Motor Transit Company. This motor freight terminal, with its L-shaped platform, was originally designed and constructed with an eye to future expansion.

The design of the building was influenced by a desire for a fire-resistant structure with minimum future maintenance costs. It has a steel frame supported on a concrete foundation which extends up to the first floor level. Side walls are of brick, with aluminum window sashes and frames. A four-ply built-up asphalt roof is laid on timber sheathing supported by steel bowstring roof trusses and spot-welded purlins. The floor is of concrete with the surface treated with a metallic hardener.

First Floor for Freight

The first floor is, in effect, an extension of the original loading platform built for R.I.M.T., with a continuous open space broken only by three "rooms," all arranged on the tailboard side of the building. One of these is a stairwell; the second combines a stairwell and a dock office; and the third—at the west end of the building—is a warm room for temporary storage of perishables.

The columns supporting the second floor are spaced along the side walls in order to leave a maximum unobstructed floor area. They are about 22 ft. 6 in. apart, and are encased in concrete with steel angle corner guards. This arrangement leaves a clear platform width of 37 ft. 7 in. On the tailboard side of the building glass-sectional overhead doors, 21-ft. wide, have been installed between the columns. On the track side, similar doors are installed in every other panel with the alternate panels being closed with corrugated asbestos-cement sheets.

A covered island platform for car-to-car transfer has been built north of the main structure. It is 22 ft. wide and 610 ft. long, with the roof-supporting columns arranged along the side to allow maximum clear platform width. To the west end of this platform, a 127-ft. open unloading dock, with a ramp leading to ground level, has been built for the handling of heavy machinery and cumbersome loads.

Three stub tracks serve the island platform on the north. Four stub tracks are between the island and the main platforms. A covered crossover platform at the west end, and a covered lift bridge at the east end, connect the two. These crossovers are each 12 ft. wide, and about 568 ft. apart.

The lift bridge — which is enclosed as protection from the elements—is electrically operated. The controls are connected, through a limit switch, with derails on the four tracks passing under the bridge. This prevents locomotives from entering these tracks unless the bridge is in its "raised" position.

The second story of the main structure—41 ft. by 272 ft. in plan—is occupied by the offices of the freight agent and the division superintendent and their respective staffs. At the east end of the building is a large general

Positions are provided for five check clerks in the dock office (though only four are working in this picture). Since this picture was taken, sound-deadening baffles have been erected between each working position.

freight office, and at the opposite end the general office of the division superintendent. The long corridor connecting the two provides access to two separate stairways and to smaller offices.

In general, the outside walls of the second-floor offices have an almost continuous fenestration of projected-type windows with aluminum sashes and frames. These, augmented by ceiling fluorescent fixtures, provide adequate interior illumination.

Interior walls are plastered and painted, except that ceramic tile is used on the toilet room walls. Floors are of maple, except in the toilet rooms and on the stairs and landings, where terrazzo flooring is used.

The building is heated by a two-pile, reverse-return, four-zone, forced hot-water system. Heat is provided by a boiler having a gross radiation rating of 7,290 sq. ft., designed to burn either oil or gas. Two of the zones heat the second floor offices, the third serves the first floor dock office, "warm room" and stair wells, with the fourth serving the basement wash and locker rooms. Each zone is equipped with its own circulating pump. The system is designed to maintain a 70 deg. temperature in each zone with an outside temperature of —10 deg. with a boiler b.t.u. emersion factor of 180 deg.

THE CONVEYOR . . .

An endless, overhead truck-tow conveyor operates counter-clockwise along the two platforms and over the two crossovers. This conveyor, 1,333½ ft. long, has tow hooks spaced at 12-ft. intervals, with each hook capable of towing a 2,500-lb. gross load. An important feature of this system is a fluid drive coupling which provides slow acceleration when starting—thus eliminating jerking and spilling with ensuing cargo damage. This fluid coupling also protects the conveyor system from damage.

The tow line is supported on a 4-in. H-beam rail, with the tow hooks 7 ft. 4 in. above the floor. The drive unit consists of a 15-hp. three speed motor (1,800-, 1,200- and 900-r.p.m.) driving through a fluid coupling to a worm gear speed-reducer. The system will handle 100 loaded trucks at synchronous speeds of 120, 90, and 70 feet per minute. Due to the slippage factor in the fluid coupling, as the loads increase the speed decreases. The conveyor chain is maintained at constant tension by means of a counterweight type take-up.

Three important safety features have been built into this system. The first is a shear-pin in the drive unit. This pin is of adequate strength to operate the conveyor fully loaded, but if undue stress is placed on the system by fouling or other reasons, the pin will shear, stopping the conveyor immediately. The second is a key-operated starting switch placed in the general foreman's office where it can be operated only by authorized personnel. The third is a series of emergency stop switches installed along the entire length of the conveyor.

At the lift bridge, the conveyor rail is automatically latched and unlatched as the bridge raises and lowers. The only manual labor required is the uncoupling of the conveyor chain at each end of the bridge. The necessary slack is obtained by lifting the counterweight (located near the bridge) with a few strokes of a hydraulic jack mounted on the take-up frame. The uncoupled chain is anchored to the rail at both end of the bridge to prevent its drifting away, and to preclude any possibility of the system being accidentally started with the bridge in the raised position.

Trouble-free operation and maintenance are claimed for the conveyor system. For example, the chain can be uncoupled without the use of tools. And the hooks are so designed that tow trucks may be readily attached or detached at any speed—even the maximum. Also, all mechanical parts of the system are easily accessible for maintenance and lubrication. It was built and installed by the Mid-West Conveyor Company of Kansas City, Mo.

CENTRAL CHECKING . . .

Checking of freight flowing through the new terminal is expedited by a modern "talk-back" loudspeaker centralized checking system. This places the checkers in a properly equipped office, rather than out in the cars or on the dock, as was necessary at the old freighthouse. This system also permits each checker to work with two, three, and sometimes four, unloading crews.

The general freight agent's office at the east end of the freighthouse, on the second floor.

Support columns have been placed at the extreme sides of the floor so as to leave maximum unobstructed working area.

The checkers work in the dock office on the first floor. Each checker has a desk, surrounded on three sides with soundproofing material, equipped with a small console cabinet. This console includes a talk-back loudspeaker and four toggle levers, each with a small indication lamp. A conventional telephone operator's set, including an earphone and a breast transmitter, is supplied each checker. This set may be plugged into the console and used in place of the talk-back speaker. Use of the breast transmitter introduces less noise than the talk-back speaker, but most of the checkers prefer the speaker.

Talk-Back Speakers

The "caller" working with each unloading crew has a portable talk-back loudspeaker which can be hung—or set on a box or other convenient object—in the car being worked. An extension cord from the speaker is plugged into a receptacle on a nearby dock post.

There are 24 of these receptacles at various parts of the platform. Each is connected with a jack in a telephone-type switchboard in the office. The plug cords in this board are connected to the individual checker consoles. Each checker connects his own console with the platform plug-in stations nearest the cars he is to check.

When a caller is ready to check, he pushes a button on the face of his speaker unit which lights an indicator lamp on the checker's console plugged in to his outlet. The checker pushes down the key under the light, thereby connecting the circuit. The checker depresses a foot pedal when talking, and releases the pedal when listening.

As the caller pulls down each box or parcel, he calls the name and address of the consignee. The checker in the office checks it against the waybill, and calls back the "spot" number of the car or truck to which it is to be taken. The caller then marks this spot number on the package in chalk. Packages for each spot number are placed in separate tow trucks which are dispatched on the conveyor system as rapidly as loaded.

An advantage of this system is that each console in the checking office can be connected, by means of the plug-in switchboard, with any of the 24 platform outlets. This improves the flexibility in the assignment of checkers and dock crews. The use of talk-back speakers in the cars, rather than telephone handsets, permits the caller to proceed with his work while calling and listening without walking over to, or holding, a handset.

A microphone is provided in the foreman's office, connected with 10 paging speakers mounted at various points on the platform. These speakers are used for general announcements. For example, when an outbound car is full, an announcement is made at once to issue a new "spot" number for the overflow car. Similarly, announcements are used to get empty conveyor trucks back on to the line, to call for a fork-lift truck, or to warn that the conveyor system will be started or stopped, as the case may be. These announcements facilitate quick action, save confusion, and actually expedite the movement of freight through the terminal.

HOW IT WORKS . . .

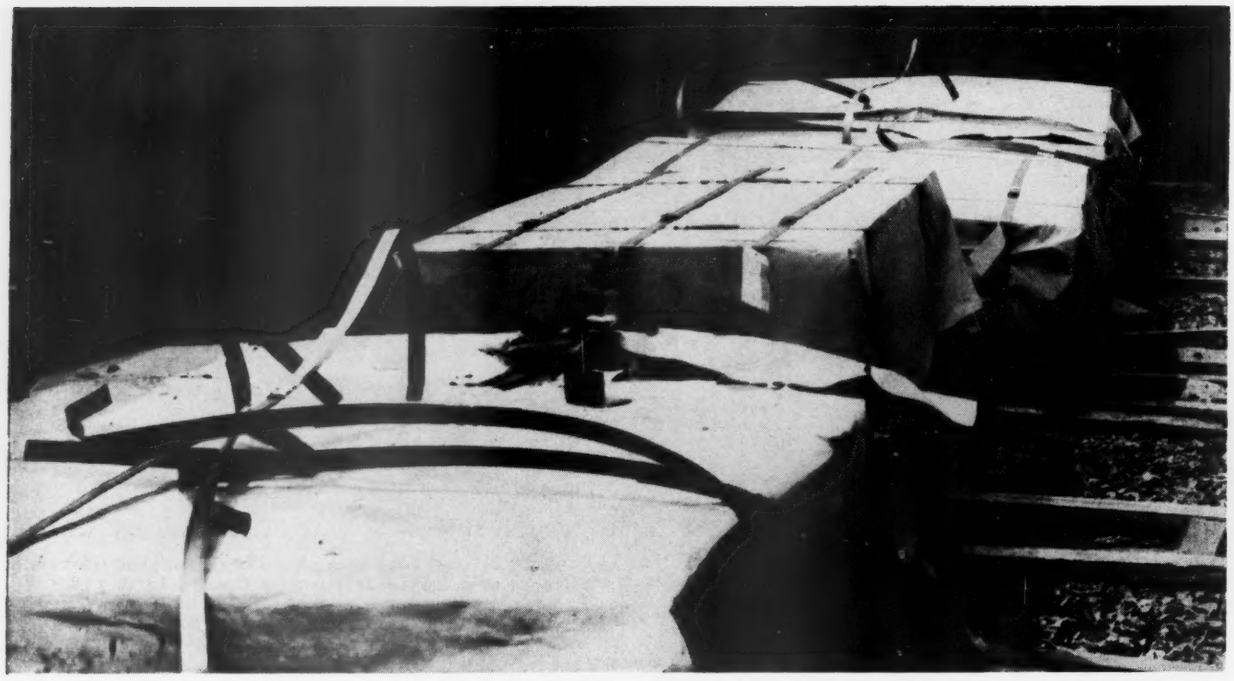
The new facility is designed to handle about 450 tons in one 8-hour shift. The work is now being performed by a force of 56 men, not including employees in the agent's office.

A 2,000-lb. and a 4,000-lb. lift truck are both maintained on a standby basis for handling any shipments which cannot be handled easily on the conveyor system.

Normally, 55 to 60 per cent of the tonnage handled at Kansas City is transfer freight. Through cars from the north and east are broken here, and cars are made for the west and southwest. In addition there is transfer of freight to and from the Rock Island Motor Transit Company which handles substituted-rail service on several routes fanning out of Kansas City. The R.I.M.T. also handles all railroad pick-up and delivery work at the new terminal, plus all outbound transfer drayage.

Outbound cars are so placed that they are lined for train movement with a minimum of switching. With the dispatching yard adjacent, it is possible to maintain daily closings as late as 6 p.m. on cars leaving on an 8:30 p.m. departure without loss of performance.

The inbound cars are kept outside of the "loop" so that late intervals can be spotted at any time without tying up operations within the terminal.



This sheet steel, properly loaded by A.A.R. standards, was damaged by excessive switching impact.

How the C. & O.'s Is Combating

A separate department administers a thorough program which makes effective use of the specialized technical knowledge of the mechanical and other departments

The operating department of the Chesapeake & Ohio's Pere Marquette District pursues a vigorous policy of freight-claim prevention through an organization set up at Detroit which serves as a clearing house for enlisting the aid of all departments in the reduction of loss and damage to shipments.

This department farms out the problems that develop to specialists in the various other departments who have the necessary detailed knowledge of their departmental operations and equipment to develop appropriate solutions. The freight claim prevention department thus depends on the cooperation of all other departments to make loss and damage prevention work. Everybody on the railroad is involved in some way in this prevention program.

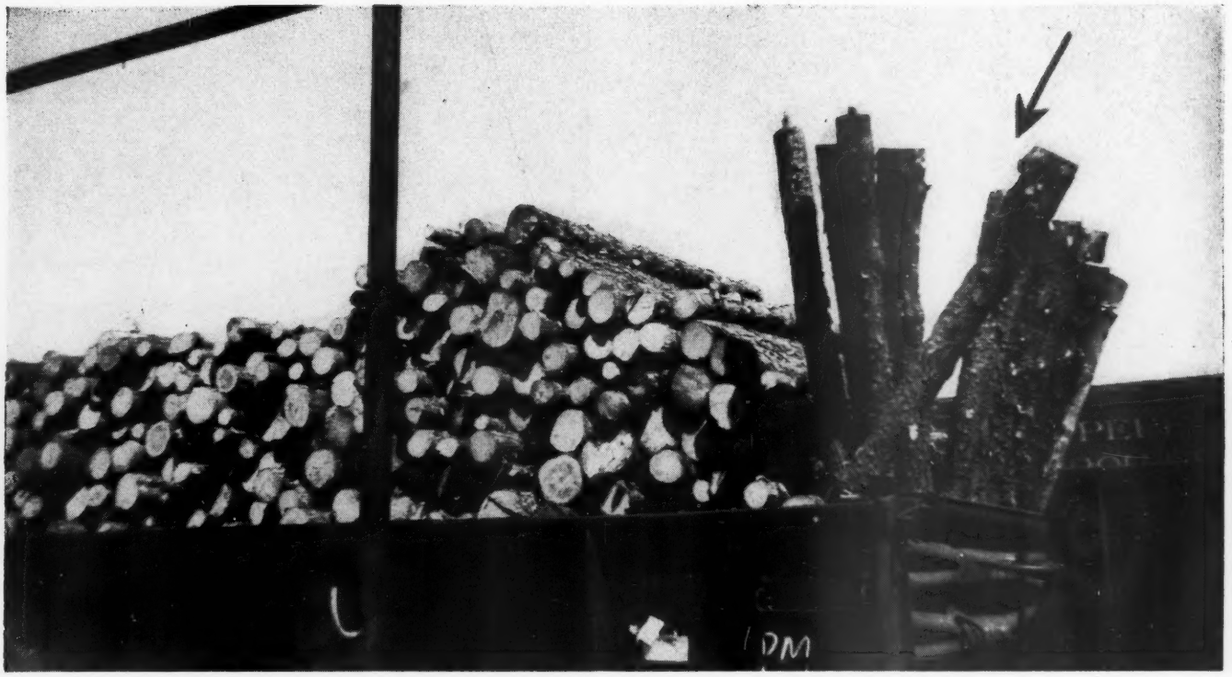
While the department organization concerned is commonly referred to by the general term, "freight claim prevention," the management considers the work to be more properly defined as damage prevention. This distinction is made on the theory that this department is not concerned with preventing claims nor the payment thereof, but rather with preventing as much as possible the damage that causes the claims to be filed.

The idea for the present intensive approach to the problem of reducing loss and damage originated with C. J. Millikin, assistant general manager of the P.M. district. From it grew today's system for gathering information from all departments and for channeling problems to men in the appropriate department who have the particular special technical knowledge to solve them in the best and quickest manner.

The channeling of information or problems from the freight claim prevention department to another department is done through the head of the second department. For example, if damage is occuring to a specific commodity and it is suspected that the difficulty is arising from the type of packaging or the method of loading, the question is referred to the superintendent of the car department. He determines how his department will handle the situation and to what man the assignment will fall.

Similarly, if damage is occurring to a given shipment which is found to be both loaded and crated properly, and rough switching is suspected to be the cause of the damage, the problem would likely be referred to both the mechanical and the transportation departments. In this case the role of the car department would be to install an impact recorder to help the other two departments trace the source of the damage.

One of the principal ways in which the knowledge and experience of all departments is utilized to protect shipments from loss and damage is through three types of meetings held at regularly scheduled intervals. Local meetings are held monthly by agents at the larger sta-



This gondola car was poorly loaded, with insufficient bolts of wood used in the end barricade.

Pere Marquette District Loss and Damage to Freight

tions. These meetings concentrate principally on local problems and are under the jurisdiction of the local agent. They are attended by employees of the freight office and the warehouse, and by pick-up and delivery personnel at the local point concerned. The Pere Marquette District management feels that the best information on the cause of damage to a shipment usually comes from the man who unloaded the car.

Divisional freight claim prevention meetings in charge of division superintendents are held on alternate months at Saginaw, Mich., Grand Rapids and Detroit, and at St. Thomas, Ont., headquarters of the four P.M. divisions. These are attended by a committee made up of the division superintendent, superintendents of terminals, trainmasters, yardmasters, road foremen of engines, chief and assistant train dispatchers, traffic-department representatives, supervising agents of larger terminals, warehouse foreman, mechanical-department representatives from the superintendent of the car department to rip track foremen and representatives of the safety department, the police department, the perishable inspection services, and the freight claim department. Also present at these meetings are invited heads of other departments and services from outside points.

At each divisional damage-prevention meeting the minutes of recent divisional meetings at other points on the Pere Marquette District are read. In this way the information developed at any one divisional meeting is made available to all meetings.

The local meetings also play a part in divisional meeting procedures. The information developed at such local meetings, as well as at divisional headquarters and other departmental meetings, is discussed and studied at the divisional meetings and cleared for handling at the general freight claim-prevention meetings.

System general freight claim-prevention meetings are held on alternate months under the superintendent of freight claim prevention. Members of the general claim-prevention committee who attend the system meetings include the assistant general manager, division superintendents, superintendent of the car department, superintendent of police, superintendent of fire prevention, freight traffic manager, superintendent of transportation, superintendent of personnel, representatives of the legal and auditing departments, and the freight-claim agent.

Copies of the minutes of the general meeting are made in sufficient number to be mailed to all agents, and they are furnished in quantity to heads of departments. The minutes supplied to the departmental heads are for distribution to key personnel and to other individuals who can use the information in connection with their activities to prevent loss and damage.

Attendance at the meetings is not restricted to those specifically on the divisional or general claim-prevention

Cases of canned milk stacked according to the principles of bonded block loading.

A shipment of brick which has been correctly placed as a single-unit floating load.

committees. Heads of labor organizations on the Pere Marquette, for example, are encouraged and invited to attend the divisional and general meetings. Other railroad supervisory personnel who may have useful information to present or who feel that they can pick up information of value to them at the meetings are likewise free to attend.

Make-up of the Meetings

Local meetings usually take about one hour, divisional meetings from one to two hours and the general claim prevention meetings from two to three hours. As an example, one divisional meeting opened up with hints on how to load furniture properly, continued with a description of the advantages of using herringbone racks in refrigerator cars to transport canned goods, discussed the proper loading of steel to prevent damage, and concluded with a discussion of tests on how the use of diesel-electric locomotives affects the smooth handling of freight. In this connection it was brought out that yard diesels should tend to reduce severe impacts considerably. It was also brought out that care must be exercised in handling the long trains that diesel locomotives can pull, as the longer the train the greater the shock to the cars can be.

Local meetings at outlying points are held in a converted parlor car. This car is not used exclusively for damage prevention work, being employed also for safety meetings and rules examinations. The car is made comfortable to aid in securing maximum attention to the subject at hand. It is air conditioned and has a small steam generator for heat in the winter so that it can be moved in freight trains and utilized at points where steam supplies may not be available. For use, it is dependent only on a source of 220-volt a.c. power. It is equipped with a movie screen, loudspeaker, two-bed stateroom and an electric kitchen for serving sandwiches and coffee. The existing rotating parlor car seats were left in place, and each is equipped with a table for writing.

One of the more conclusive examples of the value of cooperation in reducing damage concerned the movement of pickles in barrels. Considerable damage was being experienced in handling this business, and there was danger that it would be lost to the trucks. Prompt action by a committee of operating and mechanical-department men, cooperation by the shippers on some changes in loading methods, plus careful handling, corrected the conditions, and recent shipments are reaching destinations in satisfactory condition. The overall result was that damage and the resulting claims were eliminated, the business was kept and the customer satisfied.

Another interesting problem solved by the Pere Marquette, with assistance from the Association of American Railroads, was tracing the source of damage to stoves. After consistent and similar damage had been reported on stoves shipped from one point, a testing machine was used to investigate the possibility that some structural design defect in the stoves was responsible for chipping and cracking the enamel. On the first range tested, no cracks could be detected by close visual inspection; the cracks could be seen only after a Statiflux testing gun was employed. Application of the conbur incline test to the damaged stove still failed to make the damage visible, but the Statiflux showed that some of the original cracks had increased and that additional ones had developed. These resulted from a drop equal to what technicians term a third-zone shock. A second range was tested at approximately fifth-zone shock. The test caused cracks barely visible to the eye in one corner while one end remained free from cracking.

Role of the Mechanical Department

The damage appeared to result from springing or bending of the metal by shock. It could be reproduced on an unmounted top by a blow in one corner. While the incline tester indicated that it required a fourth-zone shock or more to produce visible damage, the Statiflux test showed that cracks would develop with less severe shock, although such cracks were not visible. Thus it was probable that a number of tops were damaged in the plant, during assembly or in plant handling, and were shipped as good tops because no damage could be detected by visual inspection. The invisible cracks, however, as shown by the tests, increased in number and length during shipment, and were visible on arrival at destination through no fault of the carrier.

The mechanical department is called upon to assist in all phases of proper loading procedure, including loading, unloading and reloading, at both points of origin and points of destination. Correct loading is one of the key points of the Pere Marquette damage-prevention program. It is considered the best single means of preventing damage to the shipment.

The mechanical department also makes test checks of the condition of the lading in cars not originating or terminating on the Pere Marquette. This is done at both oncoming and offgoing junction points and if necessary at intermediate junction points to develop all information needed for loss- and damage-prevention.

The mechanical department core-tests with a small cylinder each roll of newsprint which is to go to high-speed presses where difficulties would arise if the roll were out of round. This testing is done at interchange points and at terminals. From the testing it can be learned whether the damage is occurring on the Pere Marquette or on another railroad. It is furthermore an important step in solving the problem of preventing future damage to newsprint shipments.

Sheet steel in open-top cars is closely followed. Careful inspection of such cars is made at both the oncoming and offgoing junction points to determine the condition of the lading and, if it is damaged, to pin point where and how the damage occurred.

Bonded Block Loading

Canned goods loading is currently being given careful consideration by the mechanical department with particular stress on bonded-block loading. Through acceptance by shippers of this method of loading, damage has been reduced materially.

The activity of mechanical department representatives in assisting shippers in proper methods of loading has proved particularly useful to shippers introducing new types of products. One recently brought out a new type tractor, another a new style garage door. In each case car department representatives were on hand when the first shipment was to be loaded to advise the industry's shipping department as to proper methods of loading to avoid damage in transit.

Other loading aids rendered by the mechanical department include the proper spreading and distributing of loads on stop-off cars, and the application of empty-car seals to empty cars after cleaning. Car men select the proper car for the commodity to be shipped, checking such details as seeing to it that flour is not shipped in cars with oil on the floor, even though the oil may be dry. The car department also shares in the work involved in the use of impact recorders.

Impact recorders are applied by the car department when damage is occurring but where no defect is apparent in the packaging or loading. The car department's responsibility in such cases is limited to the installation of the recorder. Winding it, keeping track of it to the destination of the car, and interpreting the readings, are the responsibility of the freight claim-prevention staff.

Recorders, when installed, stay with the car to its destination whether this is on the Pere Marquette or on a foreign road. They have three principal values. They indicate the time, and consequently the place, where severe impacts occur. The ticking sound they produce usually causes switchmen to take extra care with the car to avoid hard jolts. On occasion they also serve to point out a need for making an additional check of loading or packaging procedures if damage is occurring without severe impacts taking place.

Most of the inspection work done by the mechanical department for freight claim prevention work is performed with little or no travel or expense in addition to what is required for regular departmental duties. The three district car foremen in making inspections of points under their jurisdiction visit industries along the route to check packaging methods and loading procedures when requested or in the event of difficulties. This is normally done jointly with the local car foreman.

A Teletype circuit connects all important junction points. It furnishes operating and mechanical department officers with advance information for making appropriate inspection of cars and contents on arrival and for subsequent reporting of the results of such inspections. By having this information available prior to the arrival of a train, terminal delays as a result of any extra inspection activity are practically nonexistent because the work is planned in advance. A Teletype code is used by the police department to inform local officers when any expensive commodities, such as liquor or cigarettes, are moving through their territory.

Cameras with flash attachment are issued to members of the police department and freight agents, and to the mechanical department at strategic locations. Pictures of damaged freight and equipment are posted conspicuously in enginehouses, train-crew locker rooms, warehouses and switchmen's buildings.

The Pere Marquette police organization becomes an active participant in loss and damage prevention through its investigations of losses involving part of the contents of a package or of entire packages. Special wire reports are made to police department personnel at strategic points on the railroad and they in turn forward their findings to central headquarters where results are analyzed and necessary action taken with connecting lines, other departmental heads, shippers, or whoever is concerned.

Being the eyes and ears of management, in addition to dealing with criminal acts, the police staff brings to the attention of other departments conditions that may lead to loss or damage to freight being transported as well as company property—such as reporting broken car sides from which lading can be stolen or damaged, or inspecting loads in open-top equipment to determine if accessories are missing on tractors, farm machinery and similar products.

Freight Claim Department Participation

Cooperation with and by the freight claim department is natural and complete. Any important information developed through the work of freight claim prevention or by the police department is immediately transmitted to the claim payment officer. He in turn assists in providing technical advice, reports and details on material passing through his office that might be helpful in loss and damage prevention.

Cooperation of this kind has enabled the Pere Marquette District to speed up settlement of claims filed until approximately 72 per cent of all claims received are settled within thirty days, at least half of which are involved to some extent in preliminary information developed by loss and damage prevention work.

There is no hesitancy on the part of the operating department's loss and damage prevention officer to call on and enlist the help of other operating department personnel, mechanical department, police department, claim department, traffic or legal department officers whenever necessary. In this important work the entire force is considered, and acts as, a committee of the whole in using the program with success.

Radio is used on all through freight trains and at 13 wayside land base stations on 410 miles of line.

Northern Pacific Installs Two-Channel Train and Wayside Radio

Demonstrates wide range of usefulness in normal train operations, and is outstanding in minimizing delays caused by hot boxes, brake riggings down, trains stalled in snow storms or tracks flooded

Adaptation of radio to as many phases as possible of present-day railroad operating requirements is a characteristic of a 410-mile project completed March 24 on the Northern Pacific between Dilworth, Minn., and Glendive, Mont. The project includes independent radio transmitter-receiver stations on both ends of 13 diesel-electric locomotives, and on 35 cabooses, for end-to-end communication on all through freight trains on the four subdivisions involved. Also, on the two east-end subdivisions —between Dilworth and Mandan—the project includes 11 base radio stations which, in their respective areas, can be controlled by 2 dispatchers, 14 operators and 3 yardmasters. An isolated base station at Dickinson, N.D., is controlled by the operator and yardmaster; and a station at Glendive is controlled by the operator dispatcher and yardmaster.

A characteristic of this installation is the interconnection of the radio on trains with the radio in wayside offices and with the dispatcher's telephone circuit. Calls can be initiated in either direction between the dispatcher and the conductor on a train, through either unattended or attended wayside base stations. These base stations are spaced so that they can be used to bridge gaps, if line wires are torn down by sleet storms.

Previous N.P. Radio Installations

In 1949, the Northern Pacific installed radio on freight trains operating over the Cascade mountains between Yakima, Wash., and Auburn. This installation reduced train delays, especially when cutting in helper locomotives for operation on heavy grades. Through freight trains making only a few pick-ups or set-outs are able to cover that 139-mile subdivision in an average of seven hours, compared with about eight hours before train radio. This result warranted further installations of train radio, but, before proceeding on an extensive basis, the N.P. made studies to reduce installation costs, and to develop a more comprehensive system to include not only end-to-end, but also more complete communication between trains and wayside offices and the dispatcher. These new objectives are now attained in the 1952 project.

The country is flat from Dilworth west 25 miles to Casselton. Then the grade ascends at a maximum of 0.4 per cent for about 3 miles to Buffalo. Between Oriska and Peak, there is about ½ mile of 1.0 per cent grade westward. Jamestown is in a river valley with ascending

grades of 1 per cent each way. Between Windsor and Mandan, the grade is rolling, with a maximum, for any considerable distance, of about 0.4 per cent.

Daily traffic includes four through passenger trains and four scheduled through freight trains, with two to four extra trains, depending on volume of business and weather conditions affecting tonnage. Passenger trains are limited to 70 m.p.h. maximum and freights to 50 m.p.h. Of the 204 road miles between Dilworth and Mandan, 151.7 miles are single-track main line, and 52.3 miles double track or with two alternate single tracks. Automatic block signaling is in service in the entire territory, and train movements are authorized by timetable and train orders.

One reason for choosing this Dilworth-Glendive territory for the 1952 project is that the 13 diesel-electric locomotives used on through freight trains are assigned, as a pool, for operation on these four subdivisions, and are not ordinarily run beyond these limits. Another consideration was that, in years past, heavy sleet storms in this territory have destroyed long sections of pole lines.

Radio Saves Train Time

New uses for the radio train communication are being developed all the time. Even during a normal, uneventful freight run from Dilworth to Jamestown, on March 22, the radio was used 19 times end-to-end; twice in train-to-dispatcher calls; once for the dispatcher to get information from a conductor, and twice for point-to-train information concerning cars picked up. As the diesel was being coupled to the train at Dilworth yard calls were made end-to-end to check the air. The conductor gave the engineer a radio highball. When the rear end had moved out onto the main track, and the yard departure switches were closed, the conductor notified the engineer, who promptly opened his throttle.

When the engineer encountered a wayside signal requiring a "stop then proceed," he informed the conductor. This saved flagging delays. When a stop was made at West Fargo to pick up loaded cars, the radio was used to expedite this operation and to get the train under way again. On curves, the trainmen in the caboose and the enginemen, as usual, looked along the train for possible hot boxes or other hazardous conditions. Then, as soon as such inspection was completed, they used radio end-to-end to report "all black." At Magnolia, the train was given a slow-speed inspection by trainmen on the ground, the radio being used to reduce the time for this operation from about 20 minutes to 12.

While the train entered a siding, the conductor called the engineer to tell him when to stop—such as "three more cars," "two more cars," and "in the clear now." Likewise, when pulling out of a siding, the conductor reported, "four more," "one more," "switch closed," "all on board," and "highball." Prior to installation of radio, the train would drag along at slow speed for a considerable distance, to be sure the rear brakeman would have time to close the switch and board the caboose.

Handling Hot Boxes

Local terrain and adverse weather conditions frequently make it impossible to see hand signals from head to rear of trains. Previously when men on the caboose saw a hot box, or a brake beam dragging, they had no choice but to "pull the air" to stop the train. As a result, in pre-radio days, several break-in-twos occurred each month on the 204 miles between Dilworth and Jamestown—each causing a delay of an hour or more. Now, break-in-twos have been practically eliminated.

When a train is stopped because of a hot box or brake beam dragging, the radio saves about 20 minutes in taking care of the defect and in getting the train under way again. Part of this saving is in getting word to the engineer promptly when the train crew is all on board and ready to go.

When a train is approaching a terminal, communication is established between the train and the yardmaster, so that the train can head in on the yard track that has been cleared for it. For example, the conductor of a westbound freight, when passing Bismarck, called the Mandan yardmaster and said "603 passing Bismarck with 85 loads," and the yardmaster replied, "Track 4." This saved perhaps five minutes or more otherwise re-

The engineer's radio handset is within easy reach.

Calls can be made in either direction between conductor and dispatcher.

quired for the head brakeman to call the yardmaster after the train arrived at the yard entrance.

The instances given are only a few of the uses of the radio which occur day after day, in normal uneventful runs. In a brief conversation, the division superintendent recited details of *special* circumstances in which the radio saved time. For example, on January 22, during a blizzard, with the temperature below zero, Extra 6002 west stopped on the main track, blocking four important street crossings in Fargo. Because of excessive snow, the four-unit diesel locomotive could not start the train. The dispatcher used radio to direct the crew of an arriving eastbound train to cut off their locomotive, cross over and couple onto the rear of the westbound train. Then the two engineers used their radio to an advantage in taking up slack and getting the train started without a break-in-two.

Farther along the line, this same westbound train was stopped where track men were replacing a broken rail. As a result, the train stalled on a hill. The crews were planning to cut the train and "double the hill." However, radio conversations between the crew and the dispatcher made this unnecessary. The dispatcher used the radio to direct the crew of a locomotive working on a snow plow in the vicinity to cut it off and go to help the freight up the hill. This not only saved much time for the freight, but also got it out of the way of two important passenger trains—one of which had nearly exhausted its supply of water for heating the train.

On March 25, when a westbound freight was passing Casselton, the telegraph operator thought he detected a defective wheel on a car near the rear of the train. He telephoned to the dispatcher, and the dispatcher used the radio to call the train to stop and make an inspection. Radio conversations regularly keep the dispatcher informed concerning unusual delays to trains, and he knows when they get under way again. With this information, he can plan meets more accurately, and can give more accurate figures on arrivals and calls for crews.

Branch Line Use

In addition to main-line operations, the base radio stations can reach out considerable distance on the branch lines, to communicate with radio-equipped cabooses used in some trains on these branches. This use is a by-product of the main line radio installation which was not contemplated when the system was planned. While snow plows were clearing the Fargo-Streeter branch line recently, the radio base stations at Jamestown and Cleveland were used to communicate with the caboose used with the plow. When a mixed train recently was stalled in snow on the Linton branch, the work of rerailing cars and getting this train clear of the snow was directed and reported to the dispatcher's office through the radio base station at McKenzie.

On April 6, the main line of the N.P. was washed out on the Mandan side of the Missouri river, and, for the next three days, work trains were used on both sides of the break. The division superintendent spent considerable time with one of the work trains, and used radio to keep in touch with a trainmaster at Bismarck and the assistant division superintendent at Fargo. When additional materials were needed, they were dispatched with minimum delay.

In the Northern Pacific's latest installation, the radio units on the locomotives, in the cabooses and in the land stations are all of the same type, and are, therefore, interchangeable. These units are the Bendix type MRT-5B, and include the transmitter, receiver and power supply all in one chassis. The radio units will operate on either of two frequencies, channel No. 1 at 161.25 megacycles, and channel No. 2 at 161.01 megacycles.

Each of the freight locomotives is made up of four diesel-electric units, with an "A" unit, including an enginemen's cab, at both ends. Each "A" unit is equipped with independent radio. Advantages of this practice, rather than one radio interconnected to both, are:

(1) Radio is intact for service regardless of interchange of locomotive units.

(2) Radio on rear "A" unit is available if that on leading unit fails.

(3) Head brakeman, trainmaster or other operating personnel riding in rear "A" unit, can use radio.

Moreover, the two separate units cost little more than one radio plus a train-line through the four diesel units.

In the cab of each "A" unit, the radio handset and radio control panel are on a bracket mounted on the engineer's controller. The loudspeaker, which is a University type MM2F, is mounted in the left wall of the passageway to the nose, and, although it faces the engineer, the sound is reflected from the right wall of the passageway and is well distributed throughout the cab. The radio transmitter-receiver unit is on a shelf in the upper left corner of the nose compartment. The 115-volt a.c. power for operating the radio is supplied by a Cornell-Dubilier vibrator-converter which is operated on 64-volts d.c. from the locomotive starting battery.

The installation of radio on the locomotives was done in consecutive steps, each of which was performed in a layover period, between runs. Therefore, the locomotives lost no time on the road while the radio was being installed. The complete cost of radio and power supply installed in place on locomotives was $1,600 for each "A" unit.

Cheaper Power Supply on Cabooses

Cabooses are regularly assigned to individual train crews on each of the subdivisions, a total of 35 cabooses being equipped with radio for the four subdivisions between Dilworth and Glendive.

In the radio installation made in 1949 between Yakima and Auburn, the caboose power supply included 32-volt batteries and conventional 32-volt car-lighting d.c. generators and regulating equipment. This system of power supply was so expensive that the total cost, including radio on a caboose, was approximately $5,000. For the 1952 project, the N.P. adopted the 12-volt caboose power supply system, using two Exide 6-volt storage batteries in series. These batteries are charged by an alternator-rectifier made by Leece-Neville. The alternator is mounted on the floor of the car and is driven from an axle pulley by a Dayton "V" belt drive. The 115 volts a.c. required for operation of the radio on each caboose is furnished by a Cornell-Dubilier vibrator-converter fed from the 12-volt battery.

This equipment, including the alternator-rectifier, the battery, the vibrator-converter and the radio unit, is installed under one of the bunks in the end of the caboose. This space is 2 ft. 6¼ in. wide, 6 ft. 6¼ in. long and 15 in. deep.

The conductor's radio control panel and handset are mounted on the wall to the left of his desk; a second handset is available in the cupola. The loudspeaker, which is a University type MM2, is mounted on the cupola wall above the air gage. The complete radio and power supply on each caboose equipped in 1952 totaled an average of about $2,400, compared with approximately $5,000 for the 1949 project.

The radio added only one small key switch (see arrow) to the equipment used by the dispatcher.

The Northern Pacific's Radio... *Is Easy for Employees to Use*

Channel 1 is used head-to-rear, and Channel 2 wayside-to-train, with minimum number of new controls for the enginemen, conductors, operators and dispatchers to learn to use

The division offices are in Fargo, N. D., 4.4 miles west of the freight yard at Dilworth, Minn. At Fargo, one dispatcher handles the Dilworth-Jamestown subdivision, and in the same office a second dispatcher handles the Jamestown-Mandan subdivision.

A radio transmitter-receiver on the roof of an office building in Fargo can be connected for operation by: (1) the Dilworth-Jamestown dispatcher; (2) telegraph operator at Fargo; (3) telegraph operator in the yard office at Dilworth; or (4) yardmaster in the office at Dilworth. Since Jamestown is in a valley the radio transmitter-receiver is placed at a high elevation at Bloom, 4.5 miles east of Jamestown. This transmitter-receiver at Bloom can be controlled locally by: (1) the telegraph operator at the Jamestown passenger station; (2) telegraph operator at the Jamestown yard office; or (3) the yardmaster at Jamestown yard.

At Bismarck, 5.8 miles east of the division point at Mandan, the transmitter-receiver radio equipment and antenna are on top of a 10-story hotel. This radio can be controlled locally by: (1) the operator at Bismarck; (2) the operator in the telegraph office at Mandan yard; or (3) the yardmaster at Mandan yard.

In addition to the three base stations at Fargo, Jamestown and Bismarck, base stations were installed at eight intermediate existing telegraph offices. At these offices, the antennas are on top of 85-ft. wood poles. The cost of a complete base station at an intermediate wayside telegraph office (not including engine-generator standby) is approximately $2,400, if attended, and $2,700 if unattended.

Between Fargo and Jamestown, one intermediate base station, at Peak, would have provided coverage. However, three more intermediate base radio stations were installed in order to adapt the radio to local circumstances of train operations. One such station was installed at Buffalo, at the west end of 40.6 miles of double track west from Dilworth yard. A second extra base station was installed at Sanborn, which is a junction with a branch line extending 63 miles north. In the Jamestown-Bismarck territory adequate coverage would have been available with intermediate base stations at Cleveland, Dawson and Driscoll. In addition, one more base station was installed at McKenzie, which is a junction with a branch line extending 45 miles south.

How Two Channels Are Used

All transmitter-receiver radio equipment can be operated on either of the two frequencies, Channel 1 at 161.25 mc. and Channel 2 at 161.01 mc. Ordinarily, the conductor and engineer on a train use Channel 1 to talk with each other or with crews on other trains. These con-

versations are not heard by operators at attended wayside base stations which are normally on Channel 2.

All radios on cabooses, locomotives and in wayside offices are normally in operation to receive incoming calls by loudspeaker. When an engineman wants to call a conductor, he simply takes up his handset, presses the push-to-talk button, and speaks into the transmitter. He releases his button to hear the conductor's reply. In a similar manner, the conductor can call an engineer. On a typical ordinary run these end-to-end calls were made at an average rate of a call for every five miles. When delays are encountered, many more calls are made.

Between Trains and Offices

A train anywhere between Dilworth and Mandan is always within range of at least one base station. When a call is made from a caboose to an attended station, a push switch must first be momentarily pressed to transfer the caboose radio to Channel 2. When the conversation is finished, and the conductor places his handset back on the hook, the hook switch restores the caboose radio to Channel 1. An advantage of this use of two channels (instead of only one), is that end-to-end conversations are confined to an individual train or other passing trains. Furthermore, conversations between base stations are confined to such stations. The use of a separate channel, i.e., Channel 2 for other than end-to-end, has the advantage that train-to-wayside calls are not ordinarily heard by trains not involved. If a sleet storm destroys sections of pole line, the radio can be used temporarily to bridge the gaps, and the use of Channel 2 for this service will permit these calls to be made without interference with the end-to-end calls on Channel 1.

Base Stations Connect to Dispatcher

Calls can be made from the dispatcher to a train or from the conductor of a train to the dispatcher. This is accomplished by controls which connect the wayside stations to the line wires of the telephone train dispatching circuit. The principles of these controls were developed by N.P. communications engineers, and Bendix designed and manufactured the devices. An objective was to minimize the number of pieces of new equipment to be used by dispatchers and telegraph operators. In the dispatcher's office, the telephone equipment, such as the transmitter, loudspeaker, foot-switch and Western Electric selector key, all previously used for telephone train dispatching, are now used also in connection with the radio.

If a conductor on a train wants to talk by radio to the dispatcher, he calls the operator at the nearest base station, and asks to be connected through to the dispatcher. The operator then throws a small toggle switch which connects the base radio to the dispatcher's telephone circuit. In the reverse direction, if the dispatcher desires to contact a train, he uses his W.E. selector key to call the operator in the usual manner. Then the operator throws the same toggle switch, connecting the dispatcher's telephone line to the radio. In this case the operator, using another toggle switch, transfers the base radio to Channel 1.

Regardless of whether the call is initiated by the conductor or by the dispatcher, the dispatcher, in order to "key" the distant radio, must first close a telephone-type key-switch on his desk. This makes connection through contacts on his press-to-talk foot switch so that when he presses this foot switch, an audio tone—or "beep"—goes out on the line to "key" the transmitter at the remote station, so that words spoken by the dispatcher will go out over the radio. As he releases his foot switch, an impulse goes out to cause the radio to revert to "receiving."

When the dispatcher finishes the conversation with a conductor, he restores his key switch to normal, thus preventing the short "beeps" from going out on the line when he again uses his foot switch in regular telephone service. This small key switch is the only additional item of equipment for the dispatcher to use when adding radio to the previous telephone train dispatching system.

Calls Through a Closed Station

When the telegraph operator finishes his tour of duty at an office which is to be closed for the remainder of a 24-hour period, he switches the radio from Channel 2 to Channel 1, then throws a red-flagged toggle switch from "Manual" to "Automatic." Thereafter calls can be made from dispatcher to train, or from conductor to dispatcher, automatically through the unattended station.

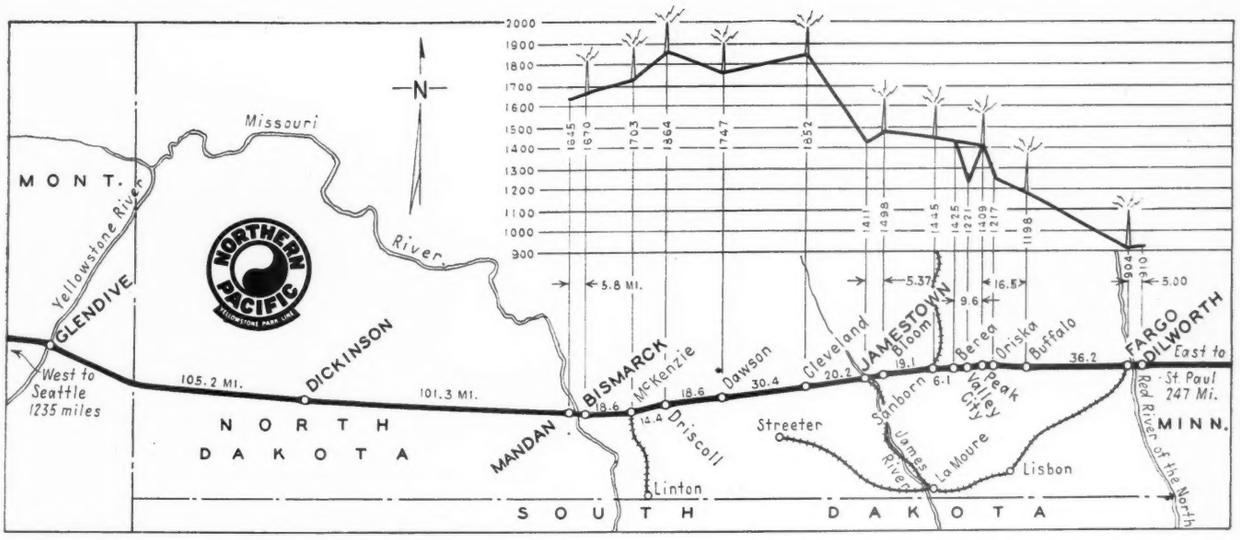
When the conductor in the caboose of a train is to make a call to the dispatcher through a base station that is then closed, he first pushes a button marked "Dispatcher," which causes a special audio tone to be transmitted on Channel 1. At the nearest base station this audio tone operates a select-hold unit which connects the output of the way-station radio receiver to the dispatcher's line circuit. This connection remains during the interchange of conversation between the mobile unit and the dispatcher, and then acts automatically to disconnect the way-station from the dispatcher.

When the dispatcher makes a call over his line wires to an unattended station and thence over radio to a caboose, he uses the regular W.E. selector buttons to send out a special code that picks up an extra selector at the unattended station. A contact in this selector operates special devices to connect the line wires and the radio. In a call thus originated by the dispatcher, by means of his telephone selector, the wayside radio equipment will remain connected to the telephone line until the conversation is finished, and the dispatcher again uses his selector key to send out the same combination code to again operate the extra selector at the wayside station. By means of an "all call" selector combination, the dispatcher can pick up simultaneously all the radios that are set for automatic operation at closed stations.

Use of Radio by Four Men

At Fargo, the base station transmitter-receiver and antenna are on top of a 10-story building several blocks from the railroad. This station is controlled remotely by the: (1) operator in telegraph office at Fargo; (2) operator in telegraph office at Dilworth yard, 4.4 miles east; and (3) yardmaster in yard office at Dilworth yard office. The dispatcher can also control this base station by connection through the Fargo telegraph office.

With three of four men having access to one base radio station, the use of the radio must be coordinated and simplified. Normally the base station at Fargo is on Channel 2, as are all the wayside base stations. The loudspeakers in the telegraph operator's office at Fargo and at Dilworth yard are normally connected to receive all calls coming through the radio station at Forgo. The telephone transmitters and receivers on these men's desks, however, are normally being used on the telephone train dispatching circuit, or on other circuits. To switch over to talk on the radio, the operator must insert a conventional plug in a marked jack. He can



Radio train communication territory between Dilworth and Glendive has strategically spaced wayside base stations.

then operate the radio on Channel 2. If there is need to use Channel 1, he can flip the toggle switch to the proper position.

Only the telegraph operators can change channels by means of toggle switches. If the yardmaster must use Channel 1, he has a pushbutton for this purpose which must be held down continuously until he is through using that channel. When he releases the pushbutton the radio is restored to Channel 2. This arrangement prevents confusion because no more than two men, both telegraphers, can leave the radio on the wrong channel. In actual practice of course they rarely do so. A lamp at each control location shows which channel the radio is on.

The yardmaster at Dilworth is provided with a toggle switch by which he can cut off his radio loudspeaker if it annoys him. The operator's loudspeaker is always on, and if a call comes for the yardmaster, the operator presses a button to sound a chime in the yardmaster's office, so he can then either turn on his loudspeaker or take up his handset to talk.

The radio units in the locomotives, cabooses and land stations are the same type, and each includes transmitter, receiver and power supply. A total of 72 of these units are in service on this installation. One reason the N.P. adopted a unit all on one chassis is to facilitate replacement of the whole unit when any radio trouble develops. Spare units are kept at Fargo, Dilworth, Jamestown, Mandan and Glendive. When a defective radio unit is taken out of service, it is placed in a special shipping box, and sent to the radio shop. A radio repair shop has been established at Mandan, centrally located in the Fargo-Glendive territory. It is also well situated with respect to passenger train time for the road as a whole.

Except the transmitter-receiver units, the radio equipment in the base stations is inspected and maintained by the previously assigned communications department equipment inspectors who cover their territories in automobile trucks. If they encounter trouble in the station wiring or equipment, other than the transmitter-receiver, that they cannot locate, they can request the aid of the special radio repair man at the Mandan shop. This is seldom necessary, however, since failures are rare, and because all of the various panels are plug-in units which can be readily replaced.

This radio installation was planned and constructed by Northern Pacific forces under the direction of F. L. Steinbright, superintendent of communications. Design and propagation analysis for the mobile equipment and the base station antennas was done by F. B. Childs, radio inspector. Development and installation of the remote control and base station apparatus was in charge of M. N. Zeller, telephone inspector.

The Traveling Freight Agent's Prayer

O Lord, look with a forgiving eye, we beseech thee, on the shipper who lies to us about the fast service our competitors give him. Strengthen the memory of those shippers who are always going to route a car our way "next time." Soften the hearts of shippers who, as soon as we come in, get busy as a hen with one chicken and keep us standing around until our feet warp and then give us a short haul and want it rushed.

Surround with thy power the superintendent, chief dispatcher, trainmaster, train crew and others so that our trial car won't get lost and the shipper cuss us out—even to our ancestors.

Teach us not to complain of the roller towel on which the multitude have washed before we get there. Give us digestion like alligators that we may survive on steaks cut from the neck where the yoke works. Teach us to be thankful of the sump water served us and called coffee. Toughen our hides that we may sleep soundly in beds already inhabited.

Cause us to look with charitable eye upon our competitors who are a sorry lot anyway. Help us with our expense account which never comes out even and soften the hearts of our employers who tell us about cutting it down. Teach our wives patience so they will wait for our salaries till we get them.

In conclusion, we beg thee that, when we have our last trip, you do not send us below. We have had our part of that place here on earth. Amen.

(Reproduced with permission of the Traffic Club of Minneapolis.)

What's the Shippers' Interest in Efficient Car Handling?

By E. W. COUGHLIN
Manager, Railroad Relations
Car Service Division
Association of American Railroads

Shippers Advisory Boards' activities help railroads stretch car supply—Shippers always pay in the long run for poor equipment utilization

Freight cars in active service, according to such detailed studies as have been made over the years, are in the hands of shippers and receivers approximately 50 per cent of the time. Possibilities of—and responsibility for—securing the utmost efficiency in car utilization are therefore divided almost equally between the railroads and their patrons.

Responsibility for securing better utilization while in the hands of shippers and receivers must continue to rest largely with the regional Shippers Advisory Boards, working hand in hand with the railroads and their association, through education in those fields where cooperation is effective. Demurrage regulations or other tariff provisions may need to be strengthened by the railroads in some instances, or in emergencies such as World War II, buttressed or modified by governmental orders. Generally speaking, however, the position of the railroads and their association is that more can be accomplished with shippers and receivers through cooperation and a spirit of mutual helpfulness than through inflexible rules and penalties.

Considering the hundreds of thousands of carlot shippers and receivers of rail freight in this country, and their constantly changing personnel, it must be apparent that the job of enlisting their cooperation in the efficient handling of freight cars is an enormous and continuing one. Personal contacts are continually needed in large quantity; a large and steady diet of literature, in the form of letters, posters, folders, pamphlets, etc., can be used to good advantage.

For many years these educational efforts devolved almost entirely upon the small field force of the Car Service Division of the Association of American Railroads, and upon the sometimes inadequately indoctrinated local railroad employees. About the only ammunition they had were the car service and demurrage rules themselves—rather cold and technical compilations—plus their own convictions that better car handling was needed and could be attained.

The first real approach to education of shippers and receivers toward the realization that in their hands rested a good part of the means toward securing better car supply and rail service at a reasonable cost was in the organization of the Shippers Advisory Boards, starting in 1923. These bodies now have a membership of some 22 thousands of important shippers and receivers of carload freight. They have, therefore, afforded the individual railroads and the Car Service Division an avenue through which to acquaint users of rail service with the advantages, to railroads and patrons alike, of the A.B.C.'s of efficient car usage, viz. heavier loading; reduction of turn-around time; and car service rule observance.

These avenues have been utilized by the Car Service Division to the limits of its financial ability. Advisory Board officers were convinced, by personal contact and by letter, of the mutual advantages inherent in eliminating waste of cars. Of course in the long period of adequate car supply between World Wars I and II emphasis was almost entirely upon rule observance and heavier loading, there being little need for emphasis on measures designed to speed up car handling.

Unfortunately the budget of the Car Service Division did not permit full use of posters, pamphlets, leaflets and other similar matter. With the advent of World War II, and the realization that every freight car must be made to do the work of two if transportation needs were to be adequately met, there was an immense increase in promotional and educational literature to railroad patrons, particularly aimed toward securing prompt loading and unloading. Not only was the A.A.R. able to finance rather frequent issues of this sort, but government agencies, individual railroads, shippers and their organizations and others joined in the hunt for means of saving freight car days and miles, and in the issuance of posters, pamphlets, etc.

Perhaps the most comprehensive and yet concise pamphlet issued during the war and pointing to ways and means of increasing car efficiency, both by railroads

Frank H. Cross, assistant director of traffic of General Mills Inc., is president of the National Association of Shippers Advisory Boards. The national group handles with the railroads matters which effect the territory of more than one regional board.

WAYS AND MEANS TO GREATER CAR EFFICIENCY

This is the fourth of a series of articles by Mr. Coughlin on basic principles and preferred practices in freight car distribution and handling. The series began in the February 11 issue. The next article is scheduled to appear later this month.

A Norfolk & Western conductor (right) talks with a shipper about his car needs.

and by their patrons, was the folder "Getting Over the Hump," appearing early in 1944 over the signature of the late Joseph B. Eastman, director of the Office of Defense Transportation. Issued in connection with a national campaign for the further 10 per cent increase in car efficiency deemed essential for successful progress of the war, this leaflet well enumerates the various ways of contributing to efficient car handling.

The industrial traffic manager or the employee handling transportation matters for the smaller firm needs a daily report which will show him at a glance the freight cars on hand at, or held under constructive placement for, his industry. This form should indicate also the length of time each car has been held, the explanation for delay, and some indication as to the proportion of car capacity utilized, both on inbound and outbound shipments. A suitable form, prepared by the Car Service Division, is illustrated.

It is impossible to overemphasize the importance of maintaining efficient handling of freight cars in periods of low traffic levels and rail earnings as well as in times of high traffic and high earnings. It is a fact, however, that "efficient use of cars" means something materially different in times of normal and adequate car supply from what it means in times of car shortage.

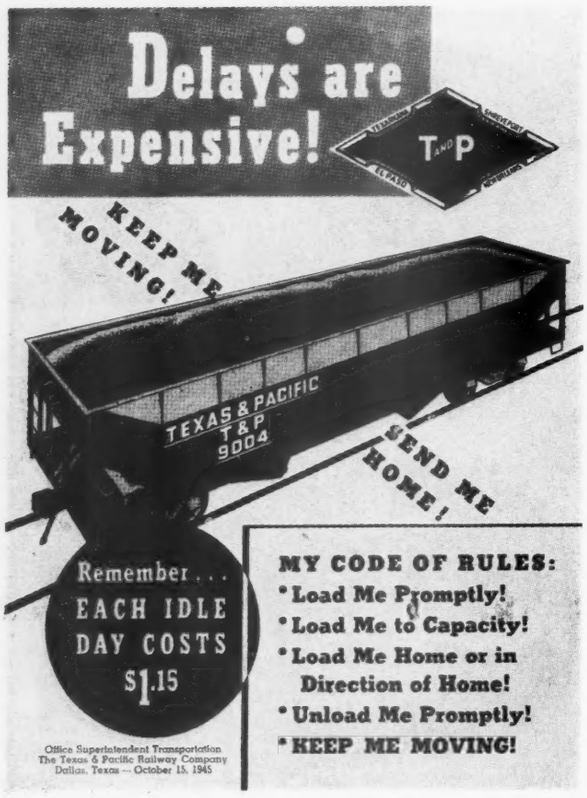
In periods of short car supply, on the shippers' and receivers' side this term means loading and unloading with the least possible delay; complete unloading to avoid loss of car days in moving cars to and from cleaning tracks; prompt billing and surrender of "shippers order" bills of lading; and prompt placement orders. To the railroad it means primarily more prompt handling.

In other words, in a period of tight car supply effort to shorten turn-around time is needed, plus, of course, heavier loading. In times of adequate car supply the emphasis turns to observance of car service rules—the loading of cars to or in the direction of owners' rails—to minimize empty mileage and put a large proportion of cars on owners' rails so they may be adequately maintained and upgraded. In these periods heavier loading and complete unloading are also important. The methods by which shippers may assist in securing the best practicable use of cars in accordance with car service rules were rather fully discussed in the February 11 *Railway Age*. Heavier loading and complete unloading will be discussed in detail in an article in a future issue.

Whatever the conditions—car shortage or adequate supply—the need remains for constant promotional and educational work with shippers, receivers and railroad employees to secure the highest degree of efficiency in freight car handling. Efficient use of cars means that from a given level of freight receipts more money is available to the carrier to pay salaries, maintain power and roadbed and otherwise improve service to shippers and receivers. Since, in the end, the users of rail transportation must assume its costs, economies in rail operation secured through efficient car handling will eventually be reflected in the rates patrons must pay for railroad service.

As mentioned, shippers, particularly through their regional Advisory Boards, can—and do—help the railroads stretch the freight car supply. With the formation of the first shippers board in 1923, the American railroads, through the Car Service Division of their association, launched an experiment in relations with the users of rail transportation which has grown through the years into one of the most valuable forms of cooperation between a vast industry and its patrons the world has ever seen.

The railroads emerged from World War I with facilities and rolling stock badly deteriorated from overuse and undermaintenance. They faced shippers and a general public who had come, during war years, to realize clearly the transcendent value of adequate rail service and the comparative lack of importance, within reasonable limits, of the old bone of contention, "rates." It had become clear to all that a constant stream of new capital must be poured into the railroad machine to permit that expansion and improvement which must con-



A poster put out by the Texas & Pacific during World War II which was directed at securing greater freight car efficiency.

tinue were the roads to serve adequately the needs of commerce. It followed that to invite this influx of capital the roads must be permitted to earn a reasonable return upon the investment.

Not all of the railroad troubles at this time were directly attributable to government operation and the "pounding" received by cars, locomotives, track and other facilities during the war. Some were a legacy of the cycles of public opinion through which the roads had passed some years earlier. Service problems had become a menace to the railroads and their relations with the public even before World War I. Car shortages, particularly in the heavy agricultural producing regions, had come almost with the regularity of the tide. Shippers felt entitled to cars, and when they were not forthcoming promptly, felt it was the railroad's fault, or that some unseen power was working to manipulate markets by interfering with the ability to move products to market. Without adequate information on railroad problems, imagining the worst, shippers resorted to law.

The railroads asserted they were doing their best to meet the situation. Immense blocks of capital were tied up in cars which were in use only part time; cars were being used as storage warehouses, keeping them out of the service for which they were needed.

The railroads had no machinery to gather accurate and dependable data as to forthcoming needs for cars in various sections and for various commodities. The amount of equipment needed and its intelligent distribution to meet shippers' requirements depend upon advance information as to prospective traffic. The shipper has the best knowledge of his prospective car requirements, but prior to organization of the Shippers Advisory Boards he had no medium by which to transmit such knowledge in any organized, collective manner, nor did the railroads have the facilities for accumulating and digesting it. The result was a dislocation of facilities, a glut of empty cars in one section and shortages in another. This led not only to a serious impairment of service but engendered misunderstanding and much bitterness.

There was, on the other hand, the conviction on the part of the railroads that shippers and receivers were doing very little to speed up transportation. If a shipper

NAME OF INDUSTRY_____

DAILY REPORT OF CAR SITUATION AS OF 9 AM._____19___
(Report should be sent to each Department Head daily after assembled by Traffic Manager)

Plant Track Capacity_____

Cars on our tracks, Loads_____MTYS_____
Loaded cars held out on "Constructive Placement"_____

When plant tracks are full carriers are permitted to put cars on "Constructive Placement" and hold them out on other Railroad tracks. When this occurs demurrage begins the same as if the cars were actually placed on our tracks. Department heads should study delays - from the time cars are CONSTRUCTIVELY placed in order to assure themselves that material is not being received in greater quantities than needed.

CAR INT.	CAR NUMBER	LADING	PLACED CONSTR' DATE	PLACED CONSTR' HOUR	PLACED ACTUAL DATE	PLACED ACTUAL HOUR	DAYS DELAY	* LOAD LMT. CAPY., Lbs.	* WEIGHT OF SHIPMENT	REMARKS: WHEN HELD OVER 24 HOURS EXPLAIN WHY DELAYED.

* Use these columns to check into opportunities for heavier loading, with consequent saving in the number of cars needed. The Load Limit capacity of each car will be found stencilled thereon.

NOTE: This form is intended for use by shippers and receivers for own compilation and information in cooperating with Railroads in the elimination of car delays. Additional supply of forms will be furnished without charge upon request to the Car Service Division, Ass'n. of American Railroads, Transportation Building, Washington, D. C.

Form recommended for use by shippers in keeping track of daily car situation.

needed five cars he was apt to ask for ten, causing dislocation and artificial shortages. He created no urge toward increased ownership of cars by individual roads through so routing his shipments that the line owning the cars received the benefit of at least a proportion of the loaded haul. If demurrage amounted to less than the cost of unloading and warehousing, cars were used as warehouses until contents were sold. Other shippers suffered in consequence.

Active Aid Necessary

Some means were necessary to convince shippers and receivers of freight that while they should have freight service when they wanted it, their own active aid was necessary to bring about this happy result. The cars of the railroads must be kept in the service for which they were intended—that of hauling goods—if the roads were to furnish adequate transportation at bearable rates.

Obviously, following World War I the stage was set for an era of cooperation and understanding between the strife-weary public and railroads. Leaders in both fields realized economic forces had so tightly bound their interests together that the slightest pulling of one against the other only retarded the progress of both. The only missing link was a method of liason between the railroads and the public. Happily, this medium of contact, cooperation and concerted action on common problems was hit upon shortly after World War I, through the formation of the first regional Shippers Advisory Board.

It was but natural that as the individual Shippers Advisory Boards grew to maturity questions should arise which were national in scope, or which extended beyond the territory of one board. An initial meeting of representatives of all thirteen individual boards was called by General Chairman Charles Donley of the Allegheny board for Chicago, November 16-17, 1932, to discuss these overlapping and national problems. From this meeting grew the organization of the National Association of Shippers Advisory Boards, which has since played a vital part in correlating the activities of the various regional boards.

Purposes of the Boards

The purposes and functions of the Shippers Advisory Boards and their scope of activities are indicated by the seven basic points upon which the boards are predicated, viz.:

1. To form a common meeting ground between shippers, local railroads, and the carriers as a whole as represented by the A.A.R. Car Service Division, for better mutual understanding of local and general transportation requirements, and to analyze transportation needs in each territory, and to assist in anticipating car requirements.
2. To study production, markets, distribution and trade channels of the commodities local to each district with a view of effecting improvements in trade practices when related to transportation, and promoting a more even distribution of commodities where practicable.
3. To promote car and operating efficiency in connection with maximum loading in the proper handling of cars by shippers and railroads.
4. To secure a proper understanding by the railroads of the transportation needs of shippers, that their regulations may fit shippers' requirements, and, likewise, to secure understanding by the shippers and their cooperation in carrying out necessary rules governing car handling and car distribution.
5. To acquaint shippers and the railroads in each section of the country with the seasonal requirements in their section, in order to promote intelligent cooperation in the handling of equipment between the different districts of the country.
6. To adjust informally car difficulties which may arise in each local territory between the carrier and the shipper.
7. To give the shipping public a direct voice in the activities of the Car Service Division on all matters of mutual concern.

The regional boards are voluntary organizations. There are no membership fees, dues or salaries. While railroad representatives are encouraged to attend board meetings and participate in discussions on the floor at these meetings, they are not accorded membership or voting power in the boards.

BENCH MARKS AND YARDSTICKS—9

"You hit on a question that has troubled me for years, by your suggestion that there may be other desirable goals for a railroad officer or supervisor than that of making as much money as he can for his employer and himself"—so writes a civil engineer of almost 30 years' experience.

"The men most likely to be advanced in rank are those who are willing to donate the most overtime—evenings, week-ends, and holidays—to the railroad. As a result, railroad men in general have become second-rate family men and citizens. They don't participate in community activities and services. They even neglect their churches.

"A few years ago the amount of overtime demanded of those in the ranks was appalling until the unions stepped in and overtime magically disappeared. Above the organized level, however, the abuse continues. If a vice-president goes into his office on Sunday morning, then all departments down the line must be manned in case he wants some information.

"The net result of all this is a lowering of morale, particularly for those below the top ranks whose ambitions don't overshadow their sense of obligation to their family and their community. Certainly the efficiency of an employee, no matter how high his rank, is lessened if he works seven days a week and some evenings too.

"In my opinion, the loyalty and devotion to the railroad of those employees who feel that they must not neglect their families, churches, and communities are at least on a par with those whose whole lives are wrapped up in their work. In the long run, the Supreme Judge will have to rule which 'bench mark' is the more accurate."

We suspect our friend has something here, but the situation isn't nearly as bad as it used to be within the memory of a lot of railroad men, still short of their sixties. There aren't very many men (we *do* know a few) who can railroad sixteen hours a day, 365 days a year, without loss of perspective in their work. For those who want to explore this problem a little more deeply, we recommend a recent book entitled "Man the Maker," by G. N. M. Tyrrell, published by Dutton.

On the other hand, if railroading too many hours a day and too many days a week is a besetting sin in some places, as many or more examples might be cited of the responsible officer who overemphasizes his social obligations. The lesson of the parable in Luke XIV, 16-24, should not be overlooked. Probably here, as elsewhere, the *via media*—the middle road between the two extremes—is the one to follow.

"We Streamlined Our Accounting"

Mechanizing Detroit & Mackinac's operations results in efficient, modern routine for short line accounting; improved paperwork procedures an essential part of rehabilitation program

By A. J. SEVENER
Auditor, Detroit & Mackinac

Economy, greater accuracy, and comparative ease in training new employees are important results of the Detroit & Mackinac's turning from manual to machine accounting methods. This modernization of our accounting procedures was only one of the streamlining moves planned by C. A. Pinkerton, Jr., when he became president and general manager of the D.&M. in 1945. Mr. Pinkerton had as much faith in the value of automatic accounting equipment as an improvement of the financial position of the road as he did in newly purchased rolling stock and diesel-electric locomotives.

When the writer became auditor for the D.&M. in 1946, he stepped into the midst of this reorganization program. Mr. Pinkerton already had begun steps to replace our manual accounting methods with mechanized procedures and had placed our order for new accounting machines for delivery the next year.

The use of machine accounting instead of the manual system gave us the opportunity to make some major changes in our accounting set-up. Necessarily, we revised all our office routine along with the machine installation, so that the various operations would dovetail into what we feel is modern short line accounting.

One of the major changes we were able to make coincidentally with mechanization was centralization of station accounting, without any increase in personnel. At the same time, our revenue accounting work, which more than doubled from 1945 to 1950, also was handled in the central office without any additional staff. (In 1950 the line hauled 1,528,543 tons and 35,043 carloads, as against 652,963 tons and 18,028 carloads in 1945.) Mechanization enabled us to absorb the accounting work of 15 stations—*and* this increase in volume without adding personnel.

Another point that brought home the advantages of mechanized accounting to the writer was the fact that the cost of our accounting equipment was easily offset by the savings it produced. The equipment not only paid for itself in a very short time through these savings, but it keeps on making similar savings every day, helping to improve the financial position of the railroad.

The machines have greatly simplified our work, too, and we can train new machine operators to do our work more easily than we could teach new clerks the old manual system. Supervisory employees, who looked on the mechanization program with some suspicion, are enthusiastic boosters for it, now that they see the advantages it offers to them and the railroad.

Generally, our modernization program included mechanizing operations on both disbursement and revenue accounting. In both departments there are specific examples of what the advantages of mechanization have meant to the D.&M. For instance, on payroll work, all our computations had been made by hand and checked on a calculator. Wage, hour and statistical reports were done manually, the payroll typed, and the pay checks then typed in a separate operation. Now we make our computations mechanically and they are checked automatically. All the statistics are prepared as by-products of the payroll writing.

Similarly, in our revenue accounting, over 70 per cent (and more, some months) of the interline revenue is computed automatically on our interline abstracting machine. This saves the full time of a calculator operator, who previously was needed to compute the manually prepared abstracts, and frees her for other work. Also, our operating ledger and general ledger are machine posted, and records produced are superior to the former handmade records. Comments of the examiner in Interstate Commerce Commission audits of our accounts since the machines have been installed have verified this superiority.

Disbursement Accounting

In accounting for maintenance-of-way time and wages, the track time book provides spaces for recording the name, hourly rate, and occupation of each man in the gang; the number of hours he works each day; and the total hours and overtime hours for the pay period. The daily distribution of time for the gang, by operating expense accounts, also is included. This record is pre-

Writing abstracts and division sheets for interline revenue settlement on the Burroughs typewriter accounting machine for abstracting and prorating. A different machine is used in the preparation of commodity statistics.

Here Burroughs typewriter accounting machines are used for accounts payable, payroll and general ledger posting (machine in the background), preparation of time and wage records and labor and distribution statistics summary tickets.

pared by the gang foreman and forwarded to the roadmaster at the end of each pay period. The time books are audited in the accounting department for addition of hours and rates and checked against distribution of work hours.

Each employee's time and wage record is filed in I.C.C. compensation classification number sequence. The employee's time for each pay period is posted to this record on a Burroughs timekeeping machine that totals the hours—straight, pro rata, punitive and "not worked" —multiplies by the rate, and prints the earnings. When this posting is completed, the machine prints totals of the hours worked (in each of the four classifications mentioned) on I.C.C. wage statistics summary tickets, which are later posted to the compensation report. Deductions for withholding tax and Railroad Retirement are posted to the employee's time and wage record, which is then ready for payroll writing.

Accounting for maintenance-of-equipment employees is performed in a similar manner, except that as posting is done the machine multiplies the total hours worked by the rate, to establish the earnings, and each account shown on the time slip is posted. To insure accuracy, totals are obtained of wages paid and distributed. Totals on the wage statistics summary tickets, and posting to the I.C.C. compensation report, are done as explained previously for maintenance-of-way employees, with records of men in each labor classification grouped together.

Train and Engine Service

Train and engine employees report daily, with each classification on a separate color form. These forms are coded in the accounting department and posted daily to employees' time and wage records. The time and wage records are filed alphabetically, by classifications, i.e., engineers, firemen, conductors, baggagemen and brakemen. The time and wage record is also posted with the Burroughs timekeeping machine. The posting is by service code. At the completion of each run of service codes, the totals are posted to labor distribution and statistics summary tickets. The I.C.C. compensation report is completed from these totals and the deductions for withholding tax and Railroad Retirement are posted to the time and wage record, which is then ready for payroll writing.

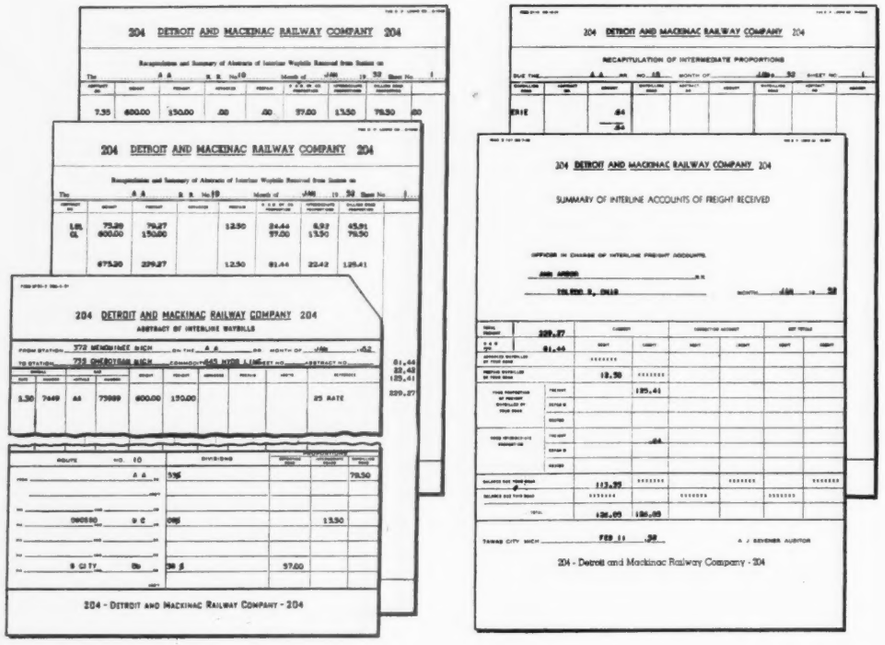
In accounting for station service time, each station agent prepares a time sheet in duplicate during the first half of each month. At the close of the first half of the month, the original is sent to the timekeeping department. The second half of the month is completed on the duplicate, which is sent to the timekeeping department at the end of the month for "second half" payroll writing. The "second half" time sheet shows the earnings for the month and is used for labor distribution. The I.C.C. compensation classification is coded in the timekeeping department for preparation of the compensation report.

Payroll Writing

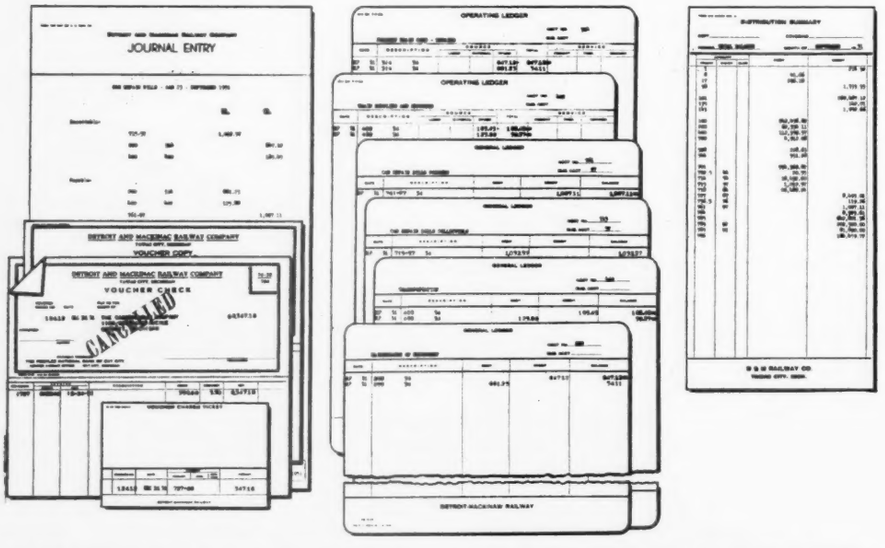
All payroll writing is done on the Burroughs payroll machine from the previously mentioned records. The payroll, individual employee's earnings record, employee's statement and pay check are prepared at one writing. In addition to current earnings and deductions, the employee's earnings record provides year-to-date earnings and withholding tax deductions. Deductions other than withholding tax and Railroad Retirement are posted from the deduction record provided at the top of the employee's individual earnings record. The machine provides totals of these earnings and deductions.

Accounts payable vouchers are also written on the payroll machine. They are prepared in multiple copies, for the vendor, the auditor (two copies, filed numerically and alphabetically), the treasurer (used as a check register) and the claim department, if in payment of a claim.

The voucher, voucher journal (filed in numerical file) and voucher charge tickets are prepared at one writing on the Burroughs machine. Voucher charge tickets are filed during the month in subaccount number sequence. At the close of the month, each subaccount is


204 DETROIT AND MACKINAC RAILWAY COMPANY 204
204 DETROIT AND MACKINAC RAILWAY COMPANY 204
204 DETROIT AND MACKINAC RAILWAY COMPANY 204
ABSTRACT OF INTERLINE WAYBILLS
204 - Detroit and Mackinac Railway Company - 204
204 DETROIT AND MACKINAC RAILWAY COMPANY 204
RECAPITULATION OF INTERMEDIATE PROPORTIONS
204 DETROIT AND MACKINAC RAILWAY COMPANY 204
SUMMARY OF INTERLINE ACCOUNTS OF FREIGHT RECEIVED
204 - Detroit and Mackinac Railway Company - 204

Interline freight revenue settlement forms.



At left are voucher journal, vouchers and voucher charge ticket prepared at one writing on the Burroughs machine. Operating ledgers are posted from the voucher journal and general ledgers are posted from the distribution summary (right).

totaled and the total of the subaccounts under each primary account is recapitulated and posted to the journal entry form.

Accounting for the 15 agency stations on the D.&M. has been centralized at the main office of the railroad. The bureau copies of freight bills and waybills are grouped by the following classifications: local received, local forwarded, interline forwarded and interline received. The bills are passed to the revision department for checking of rates, scale weights and other factors. Waybills then go to Burroughs calculator operators for verification of the extension. Also, corrected waybills are adjusted in the bureau. Refund notices and due bills also are prepared there and sent to the agent. After being revised and corrected, waybills are registered in the four classifications on a Burroughs listing machine in pro number order. When certified weight certificates are attached to the bureau copy of the waybill, charges are corrected on the bill. Corrected charges are also registered and abstracted at adjusted weight, which reduces statements of differences and corrections.

A conductor, when handling cars involving switching revenue, prepares a switching form, providing copies for the station agent who then prepares miscellaneous expense bills to cover switching charges, supplying a copy to the cashier for collection, and also one to the bureau.

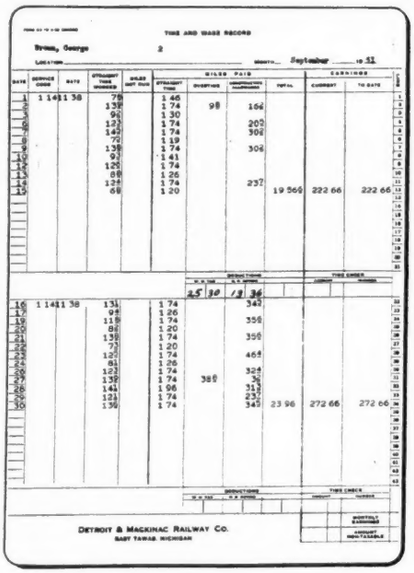
Interline revenue accounting is handled on the Burroughs typewriter accounting machine. Before abstracting on the machine the waybills are sorted to road order by road number for each receiving station. Bills are then sorted to "station form" sequence so they can be abstracted by billing road sequence and grouped together for forwarding and receiving station order. Next, waybills are abstracted in number order. The typewriter accounting machine multiplies the freight charge by the various proportions to arrive at the amount due each road, and also prepares a recapitulation on the abstracts, showing proportions of revenue due the D.&M., intermediate roads, and billing road. Carload and l.c.l. waybills are abstracted separately, and division sheets are prepared for each. A copy of the abstract is prepared for each road involved in the movement.

When each station's bills are abstracted, the abstracts are listed in road order on the station balance form and balanced to the registering of the waybills on the station waybill abstract and control. After all station totals have been balanced the abstracts are sorted to road order. The division sheets for each road are then totaled and each road is balanced to the station balance form. For example, Ann Arbor railroad freight, advances and prepay on each station's balance form are totaled, and the total should equal the Ann Arbor's division sheet totals.

After all division sheets for all roads have been balanced the abstracts for each road are separated into each of the three groups—D.&M. group, intermediate

road group and billing road group. Interline road abstracts next are sorted to road order and listed on a "recap" of intermediate proportions (Form M 110). This total is carried to a summary of interline accounts of freight received (Form M 747). The summary of interline accounts of freight bills received is posted to the interline freight balancing sheet. This form is balanced to the summary of the division sheets and a "due to" and "due from" statement is prepared for the summary of interline accounts of freight received (Form M 747). This net must equal the difference between the debits and credits on the interline freight balancing sheet.

The "due to" and "due from" statement is used by the treasurer for the preparing of drafts.

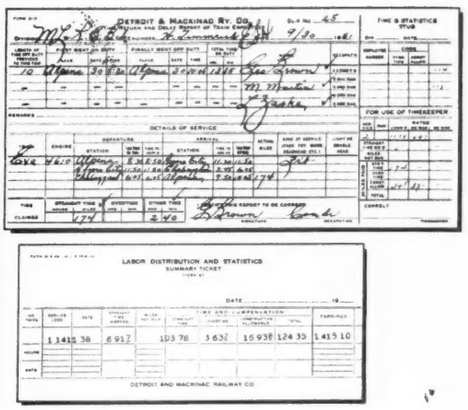


TIME AND WAGE RECORD

Brown, George — 2 — September — 19 52

DATE	SERVICE CODE	RATE	ATTENDANCE TIME WORKED	MILES OR UNIT TIME	MILES PAID ATTENDANCE TIME	MILES PAID OVERTIME	MILES PAID ADDITIONAL ALLOWANCE	EARNINGS TOTAL	EARNINGS CURRENT	EARNINGS TO DATE
1	1 1411 38		7 8		1 46					
2			13 8		1 74	98	166			
3			9 6		1 30		202			
4			13 8		1 74		302			
5			14 8		1 74		302			
6			7 2		1 19		306			
7			13 8		1 74					
8			9 2		1 41					
9			12 8		1 74					
10			8 8		1 26					
11			12 8		1 74		237	19 566	222 66	222 66
12			6 8		1 20					
						25 30	12 36			
16	1 1411 38		13 1		1 74		340			
17			9 8		1 26					
18			11 8		1 74		356			
19			8 8		1 20					
20			13 8		1 74		356			
21			7 3		1 20					
22			12 5		1 74		468			
23			8 1		1 26					
24			12 3		1 74		324			
25			13 8		1 74	38 8	5			
26			14 1		1 96		312			
27			12 1		1 74		232			
30			13 6		1 74		348	23 96	272 66	272 66

DETROIT & MACKINAC RAILWAY CO.
EAST TAWAS, MICHIGAN



DETROIT & MACKINAC RY. CO.
Division and Daily Report of Train Employee

Mo. 9 Day 30 Year 1951 — No. 45

Conductor: Geo Brown
Engineer: M Martin
Fireman: F Zacks

DETAILS OF SERVICE

TRAIN	ENGINE	DEPARTURE STATION	DEPARTURE TIME	ARRIVAL STATION	ARRIVAL TIME	ACTUAL RUN	TIME ON DUTY	LIGHT OR DOUBLE HEAD
604	7410	Alpena	8 45	Mackinaw City	2 45		6 0	
		Mackinaw City	3 45	Alpena	7 45		4 0	

TIME CLAIMED: Attendance Time 10 — Overtime — Other Time — Total 2 40

FOR USE OF TIMEKEEPER — CORRECT

LABOR DISTRIBUTION AND STATISTICS
SUMMARY TICKET

DATE ____ 19__

NO. TRAIN	NOS. OR CODE	DATE	TIME AND COMPENSATION: ATTENDANCE ALL HOURS	ALL MILES	TIME AND COMPENSATION: ATTENDANCE TIME ALLOWED	TIME AND COMPENSATION: OVERTIME	TIME AND COMPENSATION: OTHER TIME	TIME AND COMPENSATION: TOTAL	EARNINGS
	1 1411 38		6 917		103 78	3 632	15 938	124 35	1 415 10

DETROIT AND MACKINAC RAILWAY CO.

Time and wage record for train employees of the D. & M. and labor distribution and statistics summary ticket as posted on the Burroughs timekeeping machine; time report which has been prepared by conductor is shown also.

Tonnage and commodity statistics are listed on the Burroughs listing machine. First, however, the carload abstracts for each road are sorted to commodity number. All l.c.l. is posted to one statistical card for interline received at each station each month. The number of carloads are counted for each road and the count is posted in the lower righthand corner of the division sheet. Then, after all abstracts have been counted, the abstracts and division sheets go to the machine.

The first listing is the l.c.l. weight and the D.&M. per cent. This total is posted to a statistical card (Form M 18) for the first road. If, for example four cars are received from the Ann Arbor for Alpena, Mich., made up of two cars of insulating material (commodity 675), one car of tanning material (545), and one of food products (763), commodity 763 is posted to a tape on the right side of the machine, listing the number of cars, the weight in 100-lb. units, and the D.&M. proportion. After listing, the machine subtotals on this tape and totals on the statistical card in the left of the machine. The same procedure is followed for commodities 545 and 675. For convenience the cards are printed in ink of different colors—blue for interline received, brown for interline forwarded, and black for local.

When all the abstracts have been posted the totals on commodity cards are added to give a commodity total for the railroad. The commodity cards for local interline forwarded and interline received are posted to a work sheet, to combine for the monthly commodity statement. The same procedure is followed for the quarterly I.C.C. commodity report.

The total number of cars and weight is balanced with the total of the division sheets, and the total of the D.&M. percentages must balance with the interline freight balance sheet.

Advantages of mechanization are strongly indicated by these examples of procedure, which show not only the variety of work which can be done mechanically, but the opportunities for error and mishandling that could exist if the work were done manually.

Mechanized accounting procedures on the D.&M. have borne out the faith of Mr. Pinkerton in the practical philosophy that improved earnings for the company are made in the railroad office by efficiency and reducing expenses, as well as by the tonnage that is hauled over the D.&M.'s tracks. Streamlining our accounting has paid off—and we'll not go back to the days of pen and ink ledgers any more than to the woodburning locomotives.

Gracing this 1,650th diesel unit to be received by the New York Central is singer Connie Russell. The 2,250-hp. diesel will be used on the "Twentieth Century Limited."

E. S. French Retires as President of B. & M. and Me. C.

Succeeded on Boston & Maine by T. G. Sughrue and on Maine Central by E. S. Miller

Edward S. French

Timothy G. Sughrue

E. Spencer Miller

Edward S. French, dean of New England railroad presidents and, in point of service, one of the oldest chief executives on any of the country's Class I railways, retired on April 23 from the presidency of the Boston & Maine and the Maine Central after having held the former position for more than two decades. He will, however, continue in the service of these two closely affiliated companies as chairman of their respective boards of directors.

As briefly reported on page 14 of last week's *Railway Age*, Mr. French will be succeeded as president of the Boston & Maine by Timothy G. Sughrue, formerly executive vice-president of both companies; and as president of the Maine Central by E. Spencer Miller, formerly first vice-president and general counsel of that company.

Edward S. French

Mr. French is a native of Portland, Me., where he was born in December, 1883. He was educated at the Somerville, Mass., Latin School and at Dartmouth College, from which he was graduated with an A.B. degree in 1906.

He received an A.M. degree from Dartmouth in 1935 and an honorary degree of Doctor of Laws from Middlebury College in 1947.

He entered the service of the Boston & Maine as a clerk in 1906 and has spent his entire career with that company and with its various affiliates and subsidiaries. This service included terms as general manager and later as president of the now abandoned White River Railroad in Vermont; as receiver and president of the Springfield (Vt.) Terminal; as president of the Montpelier & Wells River and of its present successor, the Barre & Chelsea; as vice-president of the St. Johnsbury & Lake Champlain (now the St. Johnsbury & Lamoille County); and as president of the Mystic Terminal Company, the B. & M.'s Boston waterfront subsidiary. On April 9, 1930, he was elected president of the Boston & Maine, and on September 1, 1932, he assumed, in addition, the presidency of the Maine Central and of its subsidiary, the Portland Terminal.

Mr. French is a director of the Association of American Railroads, of the First National Bank of Boston, and of the National Life Insurance Company, a trustee of the National Foundation for Infantile Paralysis, and a life trustee of Dartmouth College.

Timothy G. Sughrue

Timothy G. Sughrue, Mr. French's successor on the B. & M., was born at Nashau, N. H., on February 22, 1899, and attended the Nashua High School and the University of New Hampshire. During his college years he worked for the railroad as a sectionman and yard clerk, and, after leaving the university in June 1909, returned to it as a sectionman. Two months later he became a chainman, in 1910 a rodman, in 1911 a draftsman and in 1914 assistant supervisor of bridges and buildings. Four years later he was promoted to supervisor of bridges and buildings and in 1927 was appointed division engineer of the road's Terminal division. In 1939 he became engineer maintenance of way of the Maine Central and the Portland Terminal at Portland, but three years later he returned to Boston as chief engineer of the Boston & Maine, the Maine Central, and

the Portland Terminal. He was elected executive vice-president of the three companies in January 1949.

Mr. Sughrue was awarded an honorary degree of Doctor of Engineering by the University of New Hampshire in 1945.

E. Spencer Miller

E. Spencer Miller, the new president of the Maine Central, was born at Springfield, Vt., on April 23, 1908, and was graduated from Dartmouth College with an A.B. degree in 1931 (Phi Beta Kappa) and from Harvard Law School with an LL.B. degree in 1934. After engaging in general practice of law at Lowell, Mass., for three years, Mr. Miller began his railroad career as an attorney for the B. & M. in 1937. In 1938 he became commerce counsel and in 1940 was transferred to the Maine Central as its general attorney. He was promoted to assistant general counsel in 1943 and in 1946 was advanced to general counsel. He was elected a vice-president of the railroad in 1947 and first vice-president and director in 1949.

He has, in addition, been first vice-president of the Portland Terminal since 1949 and president of the subsidiary Maine Central Transportation Company since January of this year.

"In Mr. Miller," Maine Central directors said, in announcing his election, "the board believes it has secured a president for the railroad who will command the confidence of stockholders, the cooperation and respect of officers and employees, and a man who will receive the support of the New England public."

Two Roads Have Common Problems

The two railroads which Mr. Sughrue and Mr. Miller now head, have, in the years of Mr. French's joint presidency, been closely affiliated. Most of the highest ranking officers hold identical or comparable positions on each road and there is close correlation both in service and in use of equipment.

The two roads face all the problems common to railroads generally, such as inadequate rates and inflated operating costs. In addition, they serve a section of the country which has not recently exhibited the same high degree either of population growth or industrial development that has been shown, for example, in the Southwest; and they are especially subject to highway competition because of the comparatively short distances between important traffic producing centers and the extensive network of highways which covers the same territory.

As a result of Mr. French's administration, however, both roads are in far better shape to meet those problems, and others, than was the case when he assumed office.

The Boston & Maine, for example, with delivery of 39 diesel-electric units ordered in 1951, will be almost completely dieselized, except for its heavy and costly Boston commuter service.

Track Improved

Main-line track has been substantially improved, and with lengthy installation of centralized traffic control on its Fitchburg, New Hampshire and Portland divisions, the road is proportionately one of the country's largest users of that type of modern signaling equipment. Electrification through the Hoosac tunnel in western Massachusetts has been removed since the advent of diesel locomotives, eliminating the stops at both ends of the tunnel which formerly delayed movement of east-west freight on the road's heavy-traffic line through the Berkshire hills.

Unprofitable Mileage Dropped

Perhaps even more importantly, an impressive mileage of unprofitable, light traffic branch lines has been lopped off by abandonment, while others have been reduced to a freight-only status, with passenger service either abandoned entirely or provided by substituted buses operated by the road's subsidiary, the Boston & Maine Transportation Company. This "belt tightening" process has reduced the road's total operated route mileage from 2,089 on December 31, 1930, to 1,702 on December 31, 1951.

On the Maine Central, dieselization has progressed a little less rapidly, total ownership of motive power at the end of last year being almost equally divided between diesel and steam. The same process of lopping off unremunerative branch lines has continued, however, operated route mileage having been reduced from 1,118 on December 31, 1932, to 981 on December 31, 1951.

New Book . . .

HANDBOOK OF AMERICAN RAILROADS. By Robert G. Lewis. 256 pages; 5½ in. by 8 in.; illustrations; maps. Published by Simmons-Boardman Publishing Corporation, 30 Church street, New York 7. Price, $2.95.

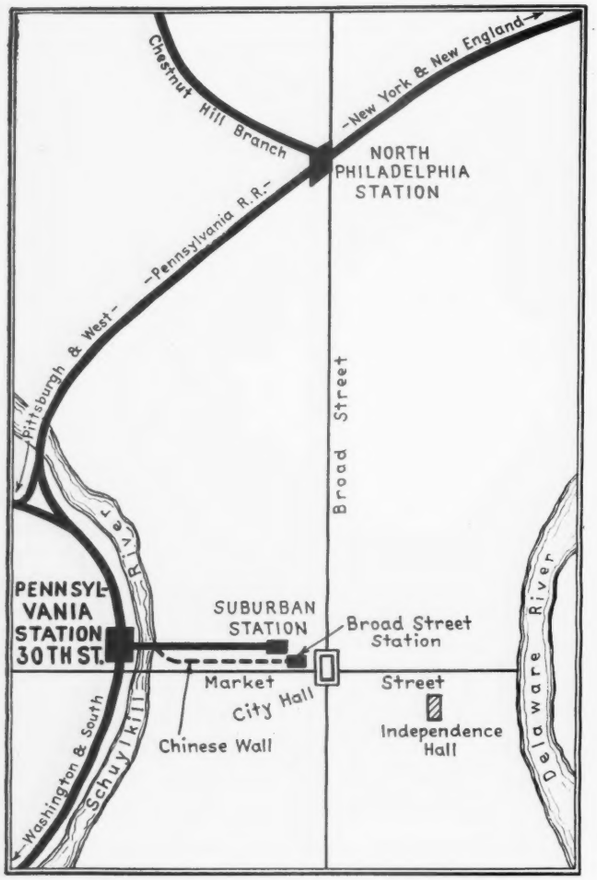
Any railroad reference library, to be worthy of the name, must include certain basic publications. This new and novel handbook deserves general acceptance as one of them.

It covers 124 Class I railroads. For each it gives, within one, two or three pages, an outline map; an illustration of a train or of typical motive power; the herald (if any); a brief historical sketch; an equally concise biography of the principal officer; and the latest available statistics prior to publication on revenues, income, expenditures for additions and betterments, freight and passenger traffic, and cars and locomotives owned, by type. Revenue and income figures and operating ratios are, for comparative purposes, given for two years. Much interesting significant information about each road's territory, traffic, equipment and services is also included.

This kind of information, of course, is available in other publications. But nowhere else, so far as this reviewer knows, can it all be found in any single publication, or in one so convenient in size, so easy to use, so low in price, and so free from extraneous and often confusing details. It should, therefore, have a definite appeal to—and a place in the library or on the desk of—the industrial traffic manager, the "fan," or the railroad man who would would not have ready access to, or regular use for, say, the Interstate Commerce Commission's annual compilations of railway statistics.

Even the experienced railroad man will find in this compact handbook many things he did not know, or had forgotten, and for the student, the "fan," and the beginner in the ranks of railroad men it is indeed, to use a trite expression, a goldmine of railroad data.

This Pennsylvania station at 30th Street, Philadelphia, has become the road's principal downtown passenger terminal in that city.



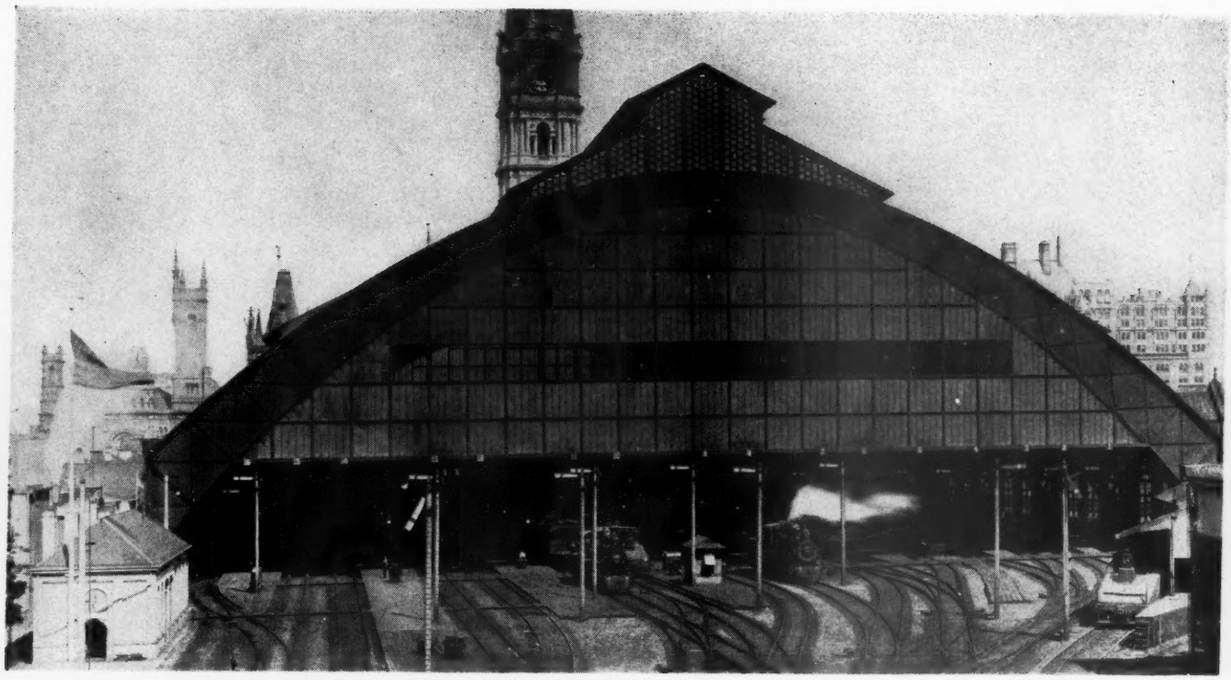
Shown on the map are the locations of P.R.R. stations in Philadelphia and the sites of the old Broad Street Station and "Chinese Wall."

Pennsylvania Closes

Begins last phase of Philadelphia improvements—The station and "Chinese Wall" are to be demolished

With departure of train No. 431 for Washington, D. C., at 1:10 a.m. on April 27, the Pennsylvania discontinued regular use of its historic Broad Street Station in Philadelphia and cleared the way for completion of the multi-million dollar "Philadelphia improvements" program, a joint railroad-city project. The station and its facilities, including the elevated track structure known as the "Chinese Wall," which extends from the headhouse to the Schuykill river, will be demolished, thereby making available 22 acres of property for downtown city development. This phase of the huge program is scheduled to start immediately and, under normal conditions, will probably require 2½ to 3 years for completion. The Pennsylvania already has spent about $83,000,000 for its part of the project and will spend approximately $12,000,000 more before it is completed.

Of the approximately 450 trains a day that once operated in and out of Broad Street Station, only about 90 were left on April 27. These trains are now handled at either Broad Street Suburban Station or at Pennsylvania Station—30th Street. The shift has made the latter, just nine-tenths of a mile from the old station, the railroad's principal downtown passenger terminal. Frequent connections have been provided for the short run between 30th Street and the Suburban Station.



An 1895 view of the huge shed of old Broad Street Station. This is the structure which was destroyed by fire in June 1923.

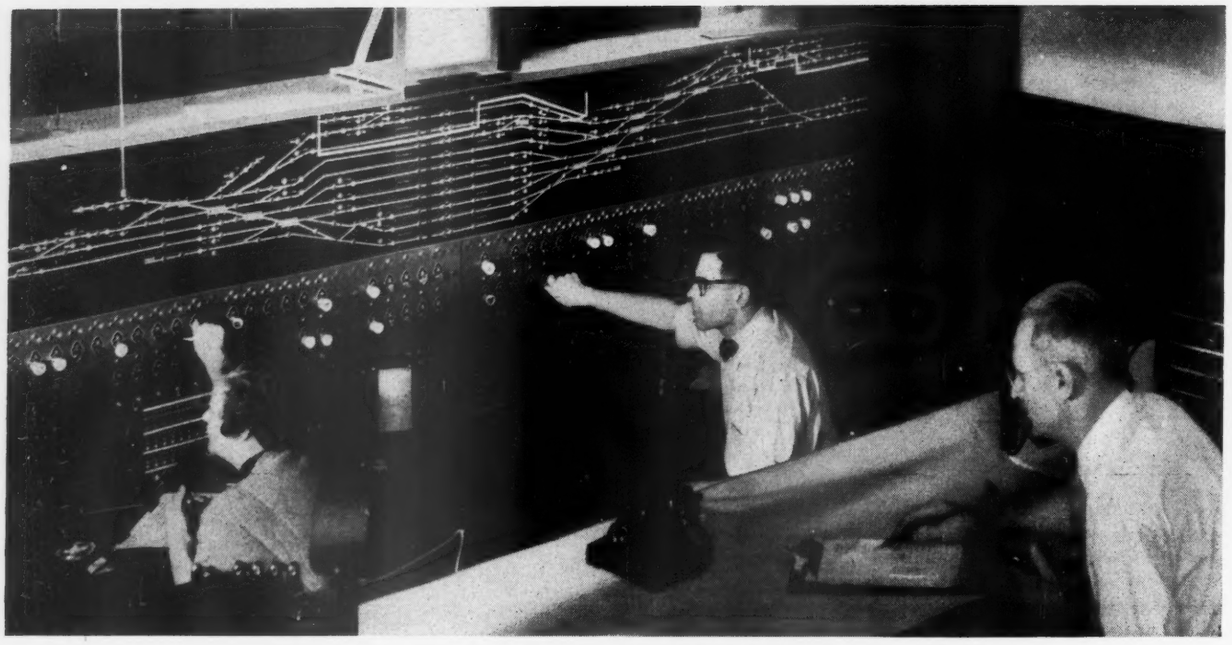
Broad Street Station

The following trains formerly using Broad Street Station now operate into and out of 30th Street's lower level: All Philadelphia-New York "Clockers"; all Philadelphia-Washington, Philadelphia-Boston, Philadelphia-Harrisburg-Pittsburgh-Erie-Buffalo, Philadelphia - Williamsport, Philadelphia-Cape Charles-Norfolk, and Philadelphia-Baltimore trains. All sleeping cars opened for occupancy in the evening before departure are parked in the lower level. All Philadelphia-Atlantic City, N. J., trains arrive on the upper level and depart from the lower level. Most Philadelphia-Trenton-New York local trains depart and arrive at the lower level, but 9 northbound and 7 southbound originate and terminate at Suburban Station.

All Philadelphia-Paoli and Philadelphia-Paoli-Parkesburg-Lancaster local trains continue to operate in and out of Suburban Station, using the upper level at 30th Street en route, as do all Philadelphia-West Chester, Philadelphia-Chestnut Hill, Philadelphia-Norristown and Philadelphia-Trenton trains. All Philadelphia-Wilmington trains use Suburban Station, except No. 421 southbound and No. 406 inbound which, formerly using Broad Street Station, now use the lower level at 30th Street.

Extensive changes and improvements were made at 30th Street to accommodate trains formerly handled at Broad Street, including addition of three new platforms and six tracks in the lower level and expansion of yards, switching and servicing facilities outside the station. The work involved about 9 miles of additional electrification. Baggage checking and storage facilities formerly available at Broad Street were transferred to 30th Street. Baggage is not handled at Suburban Station. The

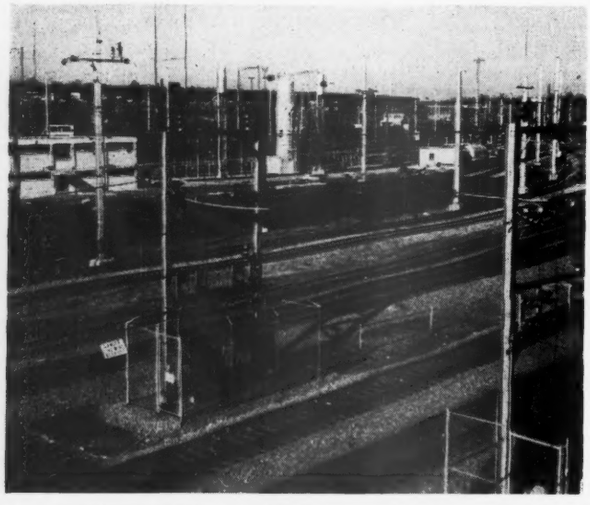
The 22-acre area which will be available for redevelopment and the new boulevard after razing of the Broad Street Station and the "Chinese Wall" is indicated here.



"Penn Tower"—the nerve center of the Pennsylvania's expanded operation providing for additional trains placed in service on the lower level of 30th Street Station—is on the fourth floor of the station.

ticket office facilities were expanded at both stations, with added personnel to care for ticket sales, reservations, information and travel guidance. During the readjustment additional employees were assigned outside ticket offices in both stations to assist passengers.

The original Broad Street Station—a four-story Gothic brick structure—was opened on December 5, 1881. It was served by eight tracks which were covered by two arched sheds. In 1890 the station was enlarged and the number of tracks increased to twelve. Two years later four more tracks were added and a train shed covering more than four acres was completed. The shed, destroyed by fire in June 1923, was reconstructed and in September 1943 was damaged by another conflagration which completely demolished a block-square track and platform area adjacent to the station.



New tracks, electrical installations, maintenance-of-equipment building and engine servicing facilities were constructed north of the 30th Street Station.

The so-called Philadelphia improvements program, of which discontinuance of Broad Street Station is a part, was sponsored by the city, which had as its major objectives the redevelopment of the center of the city, expansion of its subway system and construction of wider streets. Railroad goals included abolishment of the "Chinese Wall" and construction of the Suburban and 30th Street Stations. Work began in 1927 and was actively carried on until 1933, when 85 per cent of the railroad's program had been completed. In 1946 work was resumed and during the next several years all but the final portions of the job were completed.

In addition to razing Broad Street Station and the "Chinese Wall" the final stage of the program involves construction below street level of a steel framework to support the proposed Pennsylvania Boulevard. Tracks, platforms and an office building for the Railway Express Agency also will be built in the area south of 30th Street Station. A new Pennsylvania Greyhound bus terminal is located on the north side of the same station. Ultimately, 30th Street Station will be connected, through passageways and escalators, with the city subways.

Thousands of people bade "farewell" to Broad Street Station at public ceremonies in the station concourse during the evening of April 27. The ceremonies were climaxed by the departure at 10 p.m. of the "Orchestra special," the only train to use the station after the regularly scheduled 1:10 a.m. departure of No. 431. The 10 p.m. train was carrying members of the Philadelphia Orchestra to Syracuse, N. Y., for the first engagement of a concert tour. The orchestra had participated in the ceremonies by giving a concert under the direction of its regular conductor, Eugene Ormandy. In addition to the concert, the ceremonies included brief speeches by Walter S. Franklin, president of the Pennsylvania, and other notables. The orchestra's train also carried a number of coaches to accommodate the first 600 persons who wanted to make the last trip out of the station. Colorful, souvenir tickets, good only on the last train for the ride to 30th Street or North Philadelphia, were sold at 25 cents each.

SUPPLY TRADE

(Continued from page 18)
late **Andrew S. Butler.** The following executive changes also were announced: **Herbert J. Miller,** appointed general manager and reelected executive vice-president; **H. Vernon Smith,** appointed southern sales director and elected vice-president; **Andrew S. Butler, Jr.,** elected secretary-treasurer and appointed director of advertising; and **Raymond J. Kieber,** appointed controller.

OBITUARY

Clarence C. Rausch, assistantvice-president and manager of rust preventive sales for the Dearborn Chemical Company, Chicago, died on April 29 in Houston, Tex. He had been with the firm for 32 years, serving as assistant vice-president since 1941 and manager of rust preventive sales since 1950.

ABANDONMENTS

Application has been filed with the I.C.C. by:

BOSTON & MAINE.—To abandon a 16.7-mile line between Kittery, Me., and North Berwick. The line is part of the road's so-called Eastern Route between Portsmouth, N. H., and Portland, Me.

DENVER & RIO GRANDE WESTERN.—To abandon two of its narrow-gage branch lines, as follows: Ridgway, Colo., to Ouray, 10.3 miles, and Montrose to Cedar Creek, 9.5 miles. If this authority is granted, the road expects to convert to standard-gage the present narrow-gage line between Montrose and Ridgway, 24 miles. This would eliminate all narrow-gage trackage in the Ridgway area, where the D.&R.G.W. connects with the Rio Grande Southern. The I.C.C. has already authorized abandonment of the latter road, a 172-mile narrow-gage line.

Division 4 of the I.C.C. has **authorized:**

BALTIMORE & OHIO.—To abandon operation over a 2-mile segment of branch line in Armstrong county, Pa. The Allegheny & Western, owner of the line, will abandon the segment.

BUFFALO, ROCHESTER & PITTSBURGH.—To abandon an 0.8-mile segment of branch line at Homer City, Pa. The Baltimore & Ohio, which operates the segment under lease, has been authorized to abandon the operation.

CHICAGO & NORTH WESTERN.—To abandon its branch between Manning, Iowa, and Audubon, 16.5 miles, together with two miles of side and switching tracks. Division 4 said the line has been operating at "substantial losses" and has "no prospects" of increased tonnage.

ELGIN, JOLIET & EASTERN.—To abandon a 5-mile portion of its Coal City branch line, extending from Goose Lake, Ill., to Coal City, not used since 1937.

ILLINOIS TERMINAL.—To abandon a 2.1-mile line from Troy Junction, Ill., to the westerly limits of Troy.

NEW YORK, NEW HAVEN & HARTFORD.—To abandon a segment of branch line from Atlantic, Mass., to East Milton, 2.1 miles.

RIO GRANDE SOUTHERN.—To abandon its entire line, totaling 172.4 miles, extending from Ridgway, Colo., to Durango, and with a branch line from Vance Junction to Pandora. This narrow-gage line has been in receivership since 1929, and last December the court having jurisdiction directed the receiver to apply for permission to abandon the line *(Railway Age,* January 28, page 53).

UNION PACIFIC.—To abandon operations over the Fairfield branch of the Los Angeles & Salt Lake. The line extends from Cutler, Utah, to Five Mile Pass, 23.6 miles. Division 4 also authorized abandonment of the line by the L.A.&S.L.

CONSTRUCTION

Atchison, Topeka & Santa Fe.—The American Bridge division of the United States Steel Corporation has been awarded a contract for erection of steel bridge superstructures along the change of line between Wylie, Tex., and Copeville in connection with construction of Lavon dam.

Galveston, Houston & Henderson.—Approximately four miles of main track will be equipped with automatic block signals at a cost of about $31,000. The general office building in Galveston will be equipped with air conditioning at a cost of about $15,000.

Grand River.—A new freight yard, freighthouse and office will be constructed at Kitchener, Ont., at an estimated cost of $233,000. Actual work will cover a two-year period with grading of the site, installation of a 7-ft. culvert and the laying of 2,870 feet of trackage scheduled for completion in 1952 at a cost of $73,000. Contract for the office and freighthouse building will not be let until 1953.

Lake Erie & Northern.—A new express house and office for the Canadian Pacific Express Company will be built at Brantford, Ont., at a cost of $67,500. Although the contract has not yet been let, it is expected that the work will be completed before the end of this year. A new siding also will be constructed to connect the new building with present trackage.

Missouri Pacific.—This road has received I.C.C. clearance for relocating the connecting line between its Twelfth Street yard and its Lesperance Street yard at St. Louis. The change will include construction of approximately 4,609 feet of new trackage, at an estimated cost of $1,240,000 — most of which will be paid for by state and federal highway funds. The road will abandon approximately 2,662 feet of existing trackage, and will acquire operating rights over another 1,335 feet of city-owned line. This relocation will eliminate several grade crossings, and make way for a new six-lane urban highway.

St. Louis-San Francisco.—These three projects have been authorized, at indicated estimated costs: New headquarters building for Southern division at Amory, Miss. ($105,000); new and improved yard facilities at Wichita, Kan. ($300,000); and expansion of centralized traffic control to include territory between Clarksdale, Ark., and Critco ($300,000).

Seaboard Air Line.—A contract has been awarded to the Massey Concrete Products Company, Atlanta, Ga., for concrete slabs, piles and posts for several bridges at an estimated cost of $148,000. A yard office and a wash and locker building will be built in Howells yard, Atlanta, at an approximate cost of $39,000, by the Tri-State Construction Company of Atlanta.

Southern.—The following projects have been authorized, at indicated probable costs, for the road's own forces: A 70-ft. extension to the Cherrystone Creek bridge near Chatham, Va. ($63,000); extension to passing tracks at Macon, Ga. ($38,300) and Elko, Ala. ($33,798); new passing track at Gurley, Ala. ($36,200); and conversion of freight depot into combination depot, Marion, N.C. ($23,100).

ORGANIZATIONS

The **Railway Business Women's Association of Chicago** will hold its annual spring luncheon at the Edgewater Beach Hotel on May 10.

The **Traffic Club of Houston** will hold its annual banquet and inaugural ball in the Emerald room of the Shamrock Hotel on May 21.

The 32nd annual meeting of the **Association of American Railroads' Protective Section** is to be held in the Hotel Schroeder, Milwaukee, May 6-9. John P. Kiley, president of the Chicago, Milwaukee, St. Paul & Pacific, will address the section at an informal dinner on May 7. Other speakers during the meeting will include: C. S. Pope, vice-president, Soo Line; Major-General E. P. Parker, provost marshal general, Department of the Army; P. E. Feucht, executive vice-president, Chicago & North Western; S. F. Lynch, general manager, Southern lines, Illinois Central; and A. L. Green, special representative, Freight Loss and Damage Prevention Section, A.A.R.

The **Eastern Car Foreman's Association** will hold its next meeting on May 9, at 7:45 p.m., in Room 502, Engineering Societies Building, 29 West 39th street, New York. William H. Weigand, assistant supervisor, cars and shops, Independent Division of the New York City Transit System, will speak on "Performance of Latest New York City Subway Cars." A buffet supper will be held in the Old Timers Grill, 7 East 40th street, New York, at 6 p.m.

The **Women's Traffic Club of New York** will hold a carnival luncheon card party in the Hotel Astor at 12:30 p.m. on May 17. Proceeds will be turned over to the Free Service Fund of the Visiting Nurse Service of New York.

The newly organized **Decatur (Ill.) Railroad Diesel Club** will hold regular meetings on the first Tuesday of each month in the Assembly room of

the Wabash's mechanical office building. Meetings will start at 7:30 p.m. and railway and railway supply men visiting the area at that time are invited to attend. Membership is open to all railroad and railway supply men of the Decatur area.

FINANCIAL

Atlantic Coast Line.—*Relief from Competitive Bidding Requirements.*—This road has asked the I.C.C. for authority to negotiate for private sale of $20,000,000 of general mortgage bonds, series C. Proceeds from sale of these bonds would reimburse the road's treasury for expenditures made on roadway additions and betterments since January 1, 1950, and would provide added funds to accelerate A.C.L.'s modernization and improvement program.

Sale of these bonds would be in addition to the $22,000,000 of series B general mortgage bonds recently authorized by the commission. The series B bonds have been sold to 17 investing institutions, and the road said several of these firms have indicated an interest in additional such purchases. A similar interest has been shown by several holders of A.C.L. consolidated mortgage bonds, which mature July 1. Under these conditions the road feels it can dispose of the additional $20,000,000 of series C bonds to its best advantage through private sale.

Application for authority to actually issue the series C bonds will be filed at a later date, the road said.

Chesapeake & Ohio.—*Employees' Stock Purchase Plan.*—C. &. O. stockholders, at a special meeting in Richmond, Va., on June 18, will be asked to vote on a plan permitting employees of the road to purchase up to 300,000 C. & O. common shares by payroll deductions. Walter J. Tuohy, C. & O. president, said the plan was formulated in response to requests from many of the road's employees. The plan must be cleared by a number of government agencies, he added, as well as by a two-thirds vote of approval by the stockholders.

Under the plan, employees who have been with the road at least five years (which includes three-quarters of the total), would be eligible to buy the stock in lots of 10 shares. The employee could vote the stock and would be entitled to all privileges of a stockholder, but the stock would be held by the company until completely paid for. Dividends paid would be credited to the purchase price. After 10 shares had been paid for, an employee could apply for another 10 shares, although no further applications would be received after 300,000 shares had been so issued, or after December 31, 1956. The 300,000 shares would come from authorized but unissued stock.

The employee would pay the market price for the stock at the time he joined the plan, in monthly installments of $10. Additional payments could be made by the employee if he chose to speed up paying off the purchase price. He also would be allowed to withdraw from the plan at any time before he completed paying for 10 shares and, in such event, would receive back the money he had paid toward the securities.

Greyhound. — *Acquisition.* — This bus company has applied to the I.C.C. for authority to acquire from the Union Pacific and Chicago & North Western the stock which the two rail carriers hold in Overland Greyhound Lines. Overland Greyhound consists of the combined operations of the Interstate Transit Lines and Union Pacific Stages; and its operations generally are between Chicago and the west coast, via Denver, Colo., and Salt Lake City, Utah. (*Railway Age*, April 7, page 14).

Greyhound asked the I.C.C. for authority to issue an additional 22,247 shares of its 4¼ per cent cumulative preferred stock, and to issue a promissory note for $4,000,000. The U.P. would receive 17,897 of the preferred shares, the promissory note, and $1,100,905 for its holdings in Overland Greyhound. The C.&N.W. would receive 4,350 shares of preferred and $1,240,070 for its holdings.

Helena & Northwestern.—*R.F.C. Loan.*—In view of its recent order approving abandonment of this road's entire line, the I.C.C. has dismissed the road's pending application for approval of a $400,000 loan from the Reconstruction Finance Corporation (*Railway Age*, December 2, 1950, page 92).

Missouri Pacific.—*Reorganization.*—The United States Supreme Court, on April 21, issued an order affirming lower-court determinations which upheld the Interstate Commerce Commission's plan of reorganization for this road. The commission plan involved is that promulgated in the commission's fourth supplemental report in the reorganization proceeding, and modified in minor details by the fifth supplemental report. Those reports were dated August 2, 1949, and December 29, 1949, respectively. (*Railway Age*, August 20, 1949, page 67, and January 14, 1950, page 48.) The commission is now considering the question of whether it should reconsider the plan in the light of the M.P.'s current financial position and prospective earnings. Public hearings in that connection were held last December.

As now framed, the commission plan would not permit holders of old M.P. common stock to participate in the reorganized company, although it would provide for limited participation by holders of the old preferred. Alleghany Corporation, principal holder of the old common, was one of the appellants in the Supreme Court, which had before it five separate appeal proceedings. The appellants, other than Alleghany, included the debtor corporation and its "independent directors," which is a group comprised of John V. Farwell, III, Bolton Sullivan, and Cary N. Weisiger.

Investment Publications

[The surveys listed herein are for the most part prepared by financial houses for the information of their customers. Knowing that many such surveys contain valuable information, *Railway Age* lists them as a service to its readers, but assumes no responsibility for facts or opinions which they may contain bearing upon the attractiveness of specific securities.]

Baker, Weeks & Harden, One Wall st., New York 5

Estimated Benefits of Freight Rate Increase to Selected Groups of Carriers. April. 17.

Railroad Preferred Stocks. Shows, for 18 railroads, overall coverage, earnings per share, price, call price, and yield. April 10.

Significant Railroad Income Account Data Expressed in Percentage of Gross Revenues. April 4.

Southern Pacific. April 21.

Fahnestock & Co., 65 Broadway, New York 6.

Kansas City Southern Railway Company. Weekly Review, April 14.

Railroad Rate Decision. Weekly Review, April 21.

New Securities

Application has been filed with the I.C.C. by:

CHICAGO & WESTERN INDIANA.—To issue $65,000,00 of first collateral trust bonds, series A, of which $64,239,000 would be sold. The I.C.C. has already exempted the new issue from the usual competitive bidding requirements (*Railway Age*, April 14, page 62). In filing this application, the road simultaneously withdrew a previous application for authority to issue $52,500,000 of first and refunding mortgage bonds, series E. Discussions with financial groups caused the road to change plans and decide to issue the larger amount of collateral trust bonds.

Proceeds from sale of the new bond issue would be used as follows: To refund $50,000,000 of 4 per cent consolidated mortgage bonds, due July 1, 1952; to refund $11,739,000 of 4¼ per cent first and refunding bonds, series D, on September 1, 1952; and to provide funds for capital expenditures.

The new bonds, dated May 1, 1952, would mature May 1, 1982. In connection with this new issue, the C. & W.I. also seeks authority to issue $2,500,000 of the first and refunding bonds, series E. The latter bonds, dated March 1, 1952, and due September 1, 1962, would be pledged as additional security behind the collateral trust issue.

The five proprietary roads of the C. & W.I. will seek I.C.C. authority to assume joint liability for the new collateral trust bonds, the road said. These five roads are the Erie, the Wabash, the Grand Trunk Western, the Chicago & Eastern Illinois, and the Chicago, Indianapolis & Louisville.

Division 4 of the I.C.C. has **authorized:**

ATLANTIC COAST LINE.—To issue and sell $22,000,000 of general mortgage 4¼ per cent bonds, series B, proceeds from which will be used to pay off a like amount of first consolidated mortgage bonds, due July 1, 1952. These bonds are being sold to 17 institutional investors. They will be dated June 30, 1952, and mature June 30, 1972 (*Railway Age*, March 3, page 82).

CHESAPEAKE & OHIO.—To assume liability for $9,450,000 of equipment trust certificates, to finance in part 27 diesel-electric locomotives and 1,032 freight cars. Estimated total cost of this equipment is $11,847,803.71 (*Railway Age*, March 31, page 62). Division 4 approved sale of these

Announcing an Important New Fire Resistant Product for Railway Application

ZONE FIREPLATE
Patent Pending

POSITIVE FIRE PROTECTION

for Vertical Members and Supports of Railroad Bridges, Trestles and other Structures

Every railroad bridge and building man knows the constant threat of fire to wood bridge and trestle supports. This threat is especially acute during the long, dry summer period.

Now . . . from the company that developed the famous Libbey-Zone fire resistant process comes a completely new product—FIREPLATE. This new product is scientifically correct and thoroughly field tested and proved. FIREPLATE serves a dual purpose: (1) provides exceptional protection against drying, rotting and deterioration and (2) assures almost perfect protection against fire damage.

Even when subjected to extremes of heat, FIREPLATE remains stable . . . will not liquefy or run. Equally important, FIREPLATE is not subject to deterioration . . . the original application is all that is ever needed.

These photos, reproduced below, taken on March 28, 1952, during a typical FIREPLATE field test, show conclusively the ability of this remarkable new product development to resist fire damage.

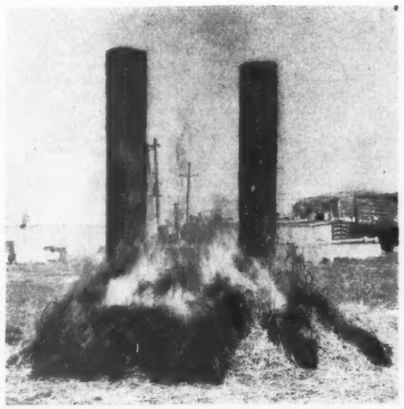
You are invited to get the complete facts about FIREPLATE. Let us arrange a demonstration . . . or send you sufficient FIREPLATE to conduct your own tests if you prefer. Write without obligation.

Start of the Test

The pole at the left is treated with FIREPLATE; the other pole is treated with a conventional protective coating. Both had been previously creosoted. Loose straw is placed around the base of each pole as shown. TIME: 9:00 AM

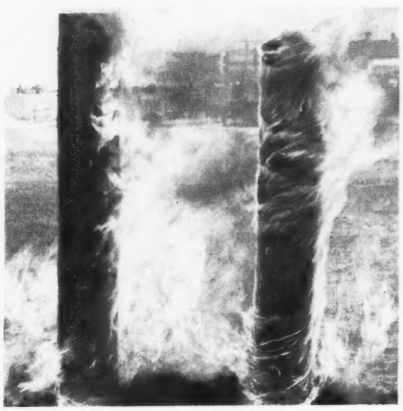
"Like a Brush Fire"

This simulated condition could happen actually on any dry day. Within three minutes after the start of the fire, flames are lapping eagerly at the bases of the two poles. TIME: 9:03 AM



The Test Takes Shape

Seven minutes after the start of the test the FIREPLATE treated pole clearly shows its ability to resist fire. The pole treated with the usual preservative is burning vigorously. TIME: 9:07 AM



The Test Concluded

Both poles shown 16 minutes after the start of the test. The FIREPLATE treatment has prevented any traceable damage to the left pole . . . the other pole is a complete loss. TIME: 9:16 AM

FIREPLATE (Pat. Pending) IS OUR EXCLUSIVE DEVELOPMENT MADE AND SOLD ONLY BY

THE ZONE COMPANY

Division of the Southwestern Petroleum Company
Box 789 Ft. Worth 1, Tex.

certificates for 99.659 with interest at 2⅞ per cent—the bid of Halsey, Stuart & Co. and 16 associates, which will make the average annual cost of the proceeds to the road approximately 2.93 per cent. The certificates, dated April 15, will mature in 30 semiannual installments of $315,000 each, beginning October 15, 1952. They were reoffered to the public at prices yielding from 1.95 to 3 per cent, according to maturity.

CHICAGO & NORTH WESTERN.—To assume liability for $6,825,000 of equipment trust certificates, to finance in part 57 diesel-electric locomotive units costing an estimated $8,549,604 (*Railway Age*, March 24, page 57). Division 4 approved sale of the certificates for 99.662 with interest at 3 per cent—the bid of Bear, Stearns & Co. and four associates—which will make the average annual cost of the proceeds to the road approximately 3.08 per cent. The certificates, dated May 1, will mature in 15 annual installments of $455,000 each, begining May 1, 1953. They were reoffered to the public at prices yielding from 1.15 to 3.1 per cent, according to maturity.

ERIE.—To assume liability for $1,800,000 of equipment trust certificates, to finance in part 18 diesel-electric locomotives costing an estimated $2,265,000 (*Railway Age*, March 24, page 57). The certificates, dated April 15, will mature in 20 semiannual installments of $90,000 each, beginning October 15, 1952. Division 4's report approved sale of the certificates for 99.055 with interest at 2⅝ per cent—the bid of Halsey, Stuart & Co. and three associates—which will make the average annual cost of the proceeds to the road approximately 2.83 per cent. The certificates were reoffered to the public at prices yielding from 2 to 2.9 per cent, according to maturity.

ILLINOIS CENTRAL.—To assume liability for $4,950,000 of series "35" equipment trust certificates to finance in part 50 diesel-electric locomotive units costing an estimated $6,631,995 (*Railway Age*, March 31, page 62). Division 4's report approved sale of the certificates for 99.043 with interest at 2¾ per cent—the bid of Halsey, Stuart & Co. and eight associates—which will make the average annual cost of the proceeds approximately 2.9 per cent. The certificates, dated May 1, will mature in 30 semiannual installments of $165,000 each, beginning November 1, 1952. They were reoffered to the public at prices yielding from 1.95 to 3 per cent, according to maturity.

PITTSBURGH & LAKE ERIE.—To assume liability for $2,460,000 of equipment trust certificates to finance in part 24 diesel-electric locomotive units costing an estimated $3,350,000 (*Railway Age*, March 24, page 57). Division 4 approved sale of the certificates for 99.021 with interest at 2¾ per cent—the bid of Halsey, Stuart & Co. and two associates—which will make the average annual cost of the proceeds to the road approximately 2.92 per cent. The certificates, dated April 15, will mature in 15 annual installments of $164,000 each, beginning April 15, 1953. They were reoffered to the public at prices yielding from 2 to 3 per cent, according to maturity.

READING.—To assume liability for $8,340,000 of series T equipment trust certificates, to finance in part 64 diesel-electric locomotives costing an estimated $10,503,471 (*Railway Age*, March 17, page 114). Division 4's report approved sale of the certificates for 99.46733 with interest at 2⅞ per cent—the bid of Salomon Bros. & Hutzler and three associates—which will make the average annual cost of the proceeds to the applicant approximately 2.96 per cent. The certificates, dated April 15, will mature in 30 semiannual installments of $278,000 each, beginning October 15, 1952. They were reoffered to the public at prices yielding from 2 to 3 per cent, according to maturity.

Security Price Averages

	Apr. 29	Prev. Week	Last Year
Average price of 20 representative railway stocks	59.73	58.28	56.68
Average price of 20 representative railway bonds	93.43	93.48	95.18

Dividends Declared

BANGOR & AROOSTOOK.—$5 preferred, $1.25, quarterly, payable July 1 to holders of record June 5.

CHESAPEAKE & OHIO.—common 75¢, payable June 20 to holders of record May 29; 3½% preferred, 87½¢ quarterly, payable August 1 to holders of record July 7.

ELMIRA & WILLIAMSPORT.—$1.19 semiannual, payable May 1 to holders of record April 18.

GULF, MOBILE & OHIO.—common, 50¢, quarterly, payable June 30 to holders of record June 10; $5 preferred, $1.25, quarterly, payable December 26 to holders of record December 6.

NORFOLK & WESTERN.—75¢ quarterly, payable June 10 to holders of record May 8.

READING.—4% first preferred 50¢ quarterly, payable June 12 to holders of record May 22.

ST. LOUIS-SAN FRANCISCO.—50¢ payable June 16 to holders of record June 2.

RAILWAY OFFICERS

EXECUTIVE

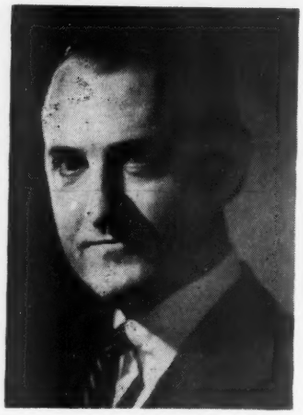
Leonard J. Knowles, assistant to president of the CANADIAN NATIONAL, has retired under the pension rules of the company. An authority on freight rates and other railway traffic matters, Mr. Knowles served as traffic adviser to the Royal Commission on Transportation from 1949 to 1951. His photograph and a biographical sketch of his career were published in *Railway Age*, May 28, 1951, page 75.

Charles L. Franklin has been appointed assistant vice-president, operations, of the CHICAGO, ROCK ISLAND & PACIFIC—not vice-president, operations, as was incorrectly reported on page 65 of the April 14 issue.

James J. Swift, general manager of the LEHIGH VALLEY at New York, has been elected also vice-president. A photograph and biography of Mr. Swift were published in *Railway Age* December 24, 1951, page 47.

FINANCIAL, LEGAL & ACCOUNTING

John B. Prizer, general attorney of the PENNSYLVANIA, has been appointed general counsel, with headquarters as before at Philadelphia, succeeding the late **John Dickinson** (*Railway Age*, April 21, page 86) as head of the road's legal department. Mr. Prizer has in recent years been largely responsible for administration of that department under Mr. Dickinson. Mr. Prizer was born in Lancaster,



John B. Prizer

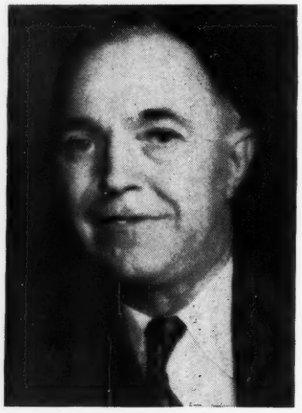
Pa., on January 6, 1909, and was graduated from Amherst in 1929. He was awarded the Simpson Fellowship for study abroad and after two years of residence at Trinity College, Cambridge, England, received the degree of bachelor of arts from Cambridge University. He was graduated from Harvard Law School in 1934 and two years later received the degree of master of arts from Cambridge. For a time Mr. Prizer was a law secretary for Mr. Justice Drew, now Chief Justice of the Supreme Court of Pennsylvania. He was admitted to the bar of that court in April 1935 and to the Philadelphia bar in December 1936. He began his career in the legal department of the Pennsylvania in July 1936 as an assistant solicitor at Philadelphia, advancing to assistant general solicitor, assistant to general counsel, and, in July 1945, to assistant general counsel. He has been general attorney since October 1947.

Duncan MacKay, chief clerk in the general accountant's office of the CANADIAN PACIFIC at Winnipeg, has been appointed district accountant, succeeding **P. J. Moon,** who has retired.

J. L. White, chief clerk in the accounting department of the BUTTE, ANACONDA & PACIFIC at Anaconda, Mont., has been named acting auditor to carry out the duties of the late **Philip A. Fitzmaurice.**

OPERATING

William J. Carroll, assistant superintendent of transportation of the CENTRAL OF NEW JERSEY at Jersey City, N.J., has been named superintendent of the CENTRAL OF PENNSYLVANIA, a subsidiary of the C.N.J., at Mauch Chunk, Pa. He succeeds **Frank J. Cassidy,** who has requested a

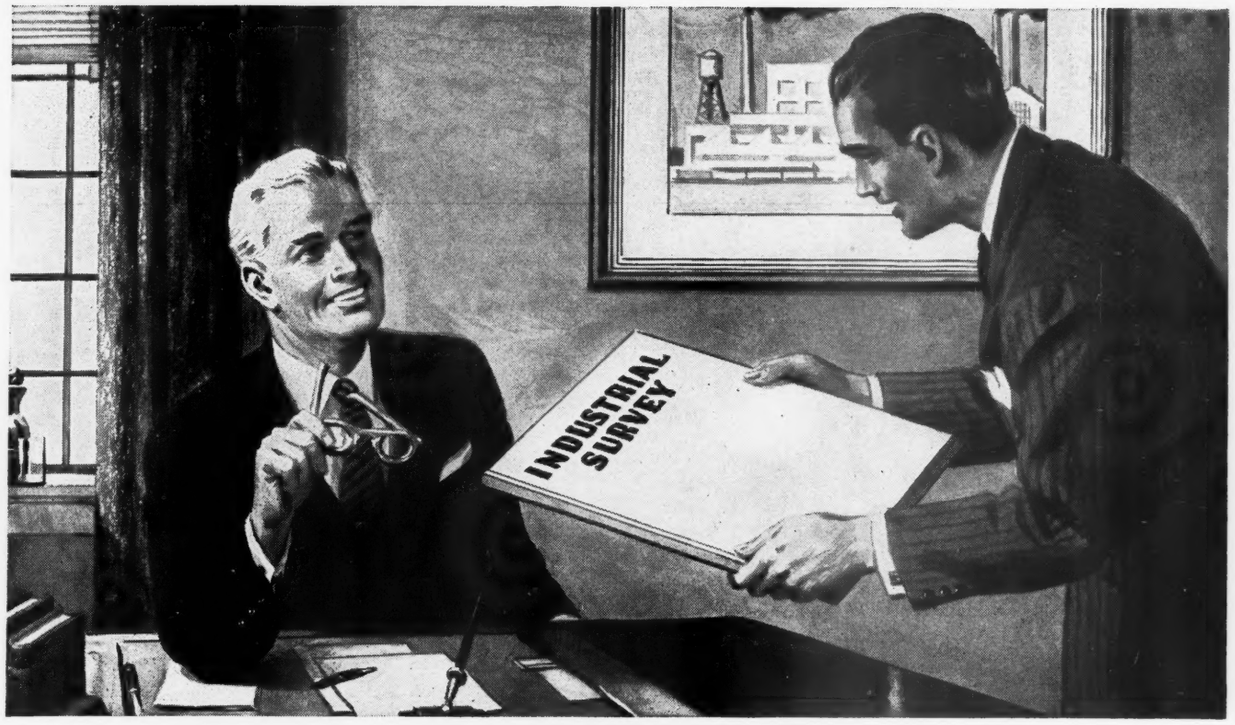


William J. Carroll

change in duties and will become train dispatcher at Allentown, Pa. Mr. Carroll joined the C.N.J. in 1918 as a car checker at Jersey City and in 1945 became assistant superintendent of the Central division there. On April 16, 1950, he was appointed assistant superintendent of transportation.

J. W. Lovett has been appointed trainmaster of the RUTLAND at Burlington, Vt., succeeding **J. H. Dyer,** transferred. Mr. Lovett will also act as the corporation's general representative.

Walter R. Weaver, assistant superintendent motive power and equip-



You be the Judge!

In selecting a new plant location the management of a company faces a serious responsibility. Industrial engineers, plant location specialists and others can supply an array of factual data, but in the final analysis management must make the decision upon which the success or failure of the enterprise may well depend.

We are fully aware of these facts, and we sympathize with management in this problem. In submitting our recommendations for a plant location, we strive insofar as it is humanly possible to put ourselves in the prospect's shoes.

We won't try to make your decision for you, but we will furnish you some mighty pertinent information which will help you in reaching that decision.

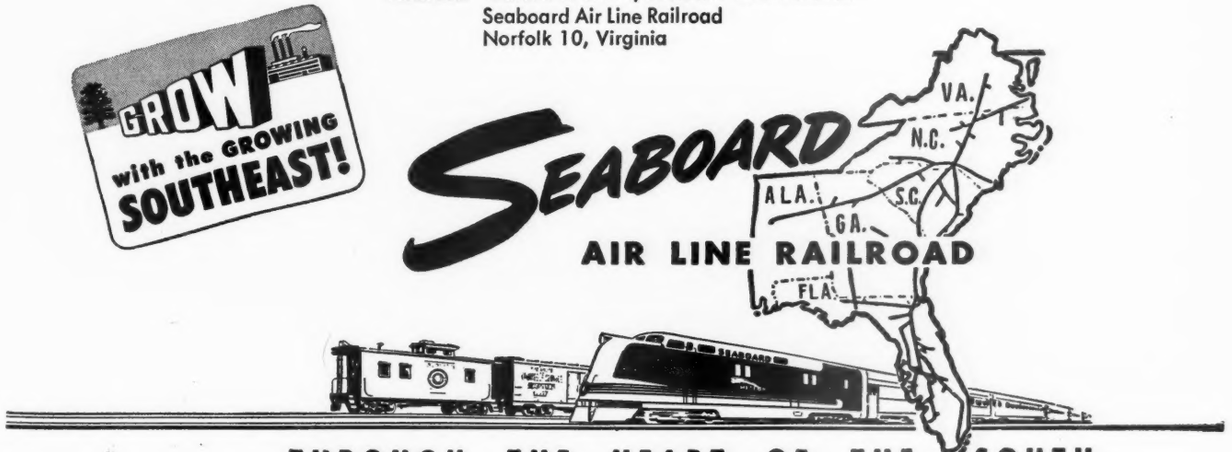
Let us submit surveys tailored to your specific requirements. Then:

You Be The Judge.

Address: Warren T. White, Assistant Vice President
Seaboard Air Line Railroad
Norfolk 10, Virginia

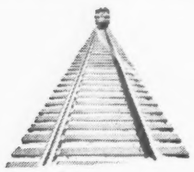
GROW with the GROWING SOUTHEAST!

SEABOARD AIR LINE RAILROAD



THROUGH THE HEART OF THE SOUTH

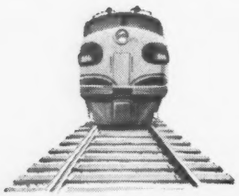
One big reason why America



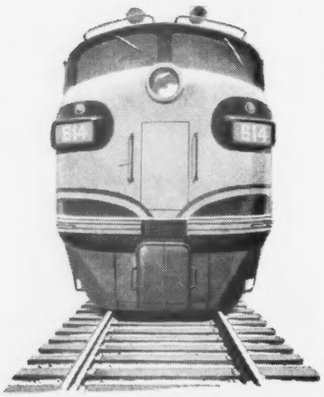
produces so much and lives so well

is that today the average freight train

carries more freight... and carries it faster



... than ever before in history.



ASSOCIATION OF AMERICAN RAILROADS

WASHINGTON 6, D. C.

You'll enjoy THE RAILROAD HOUR every Monday evening on NBC.

ment of the PITTSBURG & SHAWMUT at Brookville, Pa., has been appointed assistant general superintendent at Kittanning, Pa.

Ralph O. Johnson, acting superintendent of communications for the MISSOURI-KANSAS-TEXAS at Denison, Tex., has been appointed superintend-

Ralph O. Johnson

ent of communications. Mr. Johnson has spent his entire railroad career with the Katy, starting in 1923 as an electrician's helper. Specializing in radio engineering, his service has been entirely within the road's communications department.

Charles S. Burnham, assistant trainmaster of the SOUTHERN at Selma, Ala., has been promoted to trainmaster at Hattiesburg, Miss.

F. J. Fagan, supervisor of organization of the RAILWAY EXPRESS AGENCY, has been appointed superintendent of organization, with headquarters as before at New York, succeeding **F. V. Kraft,** who has been appointed superintendent of the New Jersey-Reading division at Newark, N.J. Mr. Kraft succeeds **N. R. Johnson,** who has been promoted to general manager of the Mississippi Valley department at St. Louis.

TRAFFIC

Robert Kelley has been appointed freight traffic agent for the GULF, MOBILE & OHIO at Meridian, Miss. He was formerly with Gulf Transport Company in Mobile, Ala.

William T. Bradburn, assistant general freight claim agent of the BALTIMORE & OHIO at Baltimore, retired on April 30, after a railroad career of 39 years.

H. F. Koenig, general agent, freight department, of the CHICAGO, BURLINGTON & QUINCY, at Chicago, has been appointed manager merchandise traffic. **E. L. Simmons,** general agent at

WAUGHMAT *Twin Cushions*

TRADE MARK REGISTERED

TYPE WM 4-6

APPROVED BY THE A.A.R. UNCONDITIONALLY

Now

NO SOLID POINT

WAUGH EQUIPMENT COMPANY

420 LEXINGTON AVENUE • NEW YORK 17, N. Y.

CHICAGO—ST. LOUIS

CANADIAN WAUGH EQUIPMENT COMPANY, MONTREAL

When a shipment's got to get there to get you out from under

Call Santa Fe

Your Santa Fe freight man knows how to make your hard shipping jobs look easy—and how to handle your common jobs uncommonly well. Call him today—find out how easy it is to *ship via Santa Fe all the way!*

F. H. Rockwell, Gen. Freight Traffic Manager
Santa Fe System Lines
Chicago, Illinois

Washington, D.C., succeeds Mr. Koenig. **M. G. Coffey** has been transferred to succeed Mr. Simmons, while **M. H. McCrossen** succeeds Mr. Coffey as general agent at Tulsa, Okla.

James A. Suddaby, agent of the RUTLAND at Malone, N. Y., has been appointed general agent at Burlington, Vt., succeeding **William J. Law,** who retired on April 30, after 44 years of service.

V. H. McLean, general freight agent of the PENNSYLVANIA at New York, has been promoted to assistant freight traffic manager of the Eastern region at Philadelphia, succeeding **W. B. Hopkins,** who has retired after 53 years of service. **W. S. Merrick,** assistant general freight agent, system traffic department at Philadelphia, succeeds Mr. McLean as general freight agent at New York. **W. D. Gordon,** division freight agent at Grand Rapids, Mich, has been named division freight agent—special duty, system traffic department at Philadelphia, succeeding **R. W. Talbot,** who has been appointed general freight agent.

J. M. O'Connor, traveling freight agent of the CHESAPEAKE & OHIO, has been appointed general agent, with headquarters as before at Boston, Mass.

C. M. Francis, general agent of the NORFOLK & WESTERN at Pittsburgh, has been appointed division freight agent at Cincinnati. **C. H. Patterson,** general agent there, has retired after almost 48 years of service. **L. W. Brown,** commercial agent at Wilmington, N.C., has been appointed general agent at Birmingham, Ala., succeeding **C. E. Gorman,** who has been transferred to Pittsburgh. **L. N. Helm,** district freight agent at Cincinnati, has been appointed division freight agent at Bluefield, W.Va., succeeding **E. P. Kinney,** who has been promoted to assistant general freight agent—sales and service at Roanoke, Va. **R. B. Torbett,** commercial agent, has been appointed general agent, with headquarters as before at Bristol, Va. **P. W. Glenn,** commercial agent, has been appointed general agent, with headquarters as before at Durham, N.C. The positions of general agent and district freight agent at Cincinnati have been abolished.

Dewey E. Manderson, assistant general freight agent of the SOUTHERN at Lynchburg, Va., has been appointed assistant freight traffic manager at Mobile, Ala., succeeding **Richard L. Butt,** who retired on May 1, after more than 47 years of service. **Joseph B. Joiner,** commercial agent at New York, has been promoted to division freight agent at Lynchburg, to succeed **Thomas R. Monroe,** who has been appointed assistant general freight agent there.

Mr. Manderson was born on February 15, 1900, at Newbern, Ala., and entered the service of the Southern as a flagman in August 1918. After four

years in the transportation department, he served successively as billing clerk at York, Ala.; transit clerk at Laurel, Miss.; chief clerk in the freight office at Bessemer, Ala.; and quotation clerk, rate clerk, chief clerk, commercial agent and district freight and passenger agent at Birmingham. In October 1945 Mr. Manderson became division freight agent at Mobile and in May 1947 was promoted to assistant general freight agent at Lynchburg.

Mr. Butt was born in Bullock county, Ala., on April 22, 1882, and entered the service of the Southern as a clerk at Atlanta, Ga., in 1904. After serving in various clerical capacities he was appointed general freight agent of the Southern's subsidiary lines. He was appointed freight traffic representative at Cincinnati in 1918; assistant general freight agent at Macon, Ga. in 1925; assistant general freight and passenger agent at Macon in April 1935; and assistant freight traffic manager at Mobile in November 1937.

ENGINEERING AND SIGNALING

Charles N. Billings, assistant superintendent of the Dallas and Austin divisions of the SOUTHERN PACIFIC LINES IN TEXAS AND LOUISIANA, has been appointed assistant to chief engineer at Houston.

E. E. Crowley, roadmaster of the DELAWARE & HUDSON, has been appointed division engineer of the Saratoga division, with headquarters as before at Albany, succeeding **C. E. R. Haight,** who has been appointed assistant superintendent of the Saratoga-Champlain division at Plattsburg, N.Y.

OBITUARY

Charles I. Sturgis, 91, who retired in October 1938 as vice-president, secretary and treasurer of the CHICAGO, BURLINGTON & QUINCY at Chicago, died on April 24 at his home in suburban Winnetka, Ill.

Philip A. Fitzmaurice, 62, assistant secretary-treasurer and auditor of the BUTTE, ANACONDA & PACIFIC, died on March 21 at St. Ann's Hospital, Anaconda, Mont., following an illness of several days. Mr. Fitzmaurice was born on October 13, 1890, at Salt Lake City and joined the B.A.& P. on September 23, 1912, as a clerk in the freight office at Anaconda, subsequently serving as revising clerk and chief clerk. On January 1, 1935, he was appointed auditor of the road and on January 1, 1943, was elected also assistant secretary-treasurer.

W. F. Kirk, retired assistant general manager of the MISSOURI PACIFIC, died April 11 in Kansas City, Mo.

Andrew W. Bowman, 80, who retired in 1943 as treasurer of the NEW YORK, NEW HAVEN & HARTFORD at New Haven, after 55 years of service, died on April 25 in Branford, Conn.

MODERN TIME and COST SAVERS BUILT BY... Standard GRAVITY & POWER CONVEYORS

"Power-Package" unit for roller and belt conveyors

HANDIDRIVE

These self-contained drive units provide tractive power for any gravity conveyor — belt or roller — convert present gravity conveyors to live or powered belt or roller — quickly at low cost.
Can be used as extensions to present conveyors, as individual conveyor units, or to build a complete flow system of belt, line roller, and gravity conveyors. Flexible and adaptable. Write for Bulletin 63-B, address Dept. RA-52.

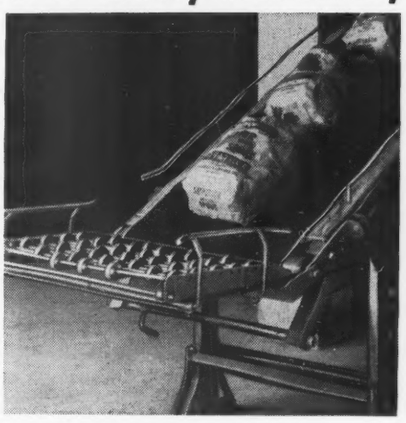
Save time loading-unloading with the

E-X-T-E-N-D-O-V-E-Y-O-R

This compact, mobile, easily maneuverable power-belt conveyor unit extends to 46 ft. in either direction and retracts to 9 ft. 10 in. Reaches into cars, trucks, trailers. Handles boxes, bags, bundles, cartons, crates, cases weighing up to 150 lbs. Available in two models — 1 way stretch and 2 way stretch — and 5 sizes. Write for Extendoveyor Bulletin — address Dept. RA-52.

Lift or Lower-floor to floor-or convey horizontally

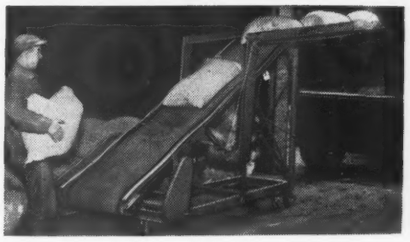
...with a Standard UTILITY BELT-VEYOR



Move boxes — cartons — crates — sacks and bundles from basement to first floor, or any floor to floor, or convey in a straight line — continuously with the Standard UTILITY BELT-VEYOR. A compact, pre-engineered unit, easy to install (over existing stairways where practical) handles commodities up to 150 lbs. — available in 4 belt widths — 10, 14, 20 and 24 inch — and equipped with adjustable guard rails to facilitate handling packages wider than belt. Electric motor operated. Write for Bulletin 63B. Address Dept. RA-52.

Load-Unload-stack-or elevate...with the

HANDIPILER



—designed for loading, unloading, stacking and elevating sacks, boxes, cases and cartons. Reversible apron — conveys up or down. Built in 14 and 24 inch widths; boom is designed to pile cartons up to 17 ft. — sacks to 12 ft. — projects into cars, trucks, trailers. Handles commodities up to 135 lbs. Write for Bulletin 63B — Address Dept. RA-52.

STANDARD CONVEYOR COMPANY
General Offices: North St. Paul 9, Minnesota
Sales and Service in Principal Cities

Send for Standard Bulletin 63B describing the above and other portable conveyor units.

Handle your LCL Freight with
JERVIS B. WEBB COMPANY
TOWVEYOR SYSTEMS

Illustrated is a Truck Freight System readily adaptable to LCL Freight Handling. Note the small trailers with ONE shipment each.

Webb TOWVEYORS Act As Mediums For:

SORTING: Shipments are sorted while being loaded through placing them on individual trailers—eliminating stacking and re-sorting.

CONVEYING: Loads are handled for long distances without any operator being required to go with them.

PACING: With its smooth continuous flow of shipments to every station, the "pacing" feature of the Webb TOWVEYOR overcomes the weak link in the "human chain." Trailers are designated clearly so that their removal from the "line" is always obvious.

CONVEYOR ENGINEERS AND MANUFACTURERS
JERVIS B. WEBB COMPANY
8945 ALPINE AVE.
DETROIT 4, MICH.
OFFICES IN PRINCIPAL CITIES
FACTORIES IN DETROIT . . . LOS ANGELES . . . HAMILTON, ONT.

NEWS OF THE RAILROAD WORLD

Sees British Railways Remaining Unified

Whatever plans the Conservative government may have for its nationalized transportation agencies, there is little likelihood that the railways in Britain will revert to the four independent systems which existed prior to 1948, David Blee, executive chief of British Railways, told newsmen at a Chicago conference on April 22.

"I don't think any British government — conservative or otherwise — would consider anything but the present unified railway system," he said, adding that standardization of equipment and practices and the coordinated organization evolved under unification are of such great value as to be preserved even if the railway system would be restored to private ownership.

Mr. Blee also told newsmen that:

- Even though nationalized, British Railways receive no subsidy from the government.
- They pay [property] taxes in the same manner as other private corporations.
- They face the same "time lag" problem that U.S. roads face in securing freight and passenger rate increases.
- "Sooner or later all industry will have to decide what it wants: the 'cost plus' rates of highway transport or the 'value' rate structure of the railways."
- With relatively few automobiles per capita, British Railways face their stiffest passenger competition from motor coaches. Distances are too short for air competition to be important.
- British Railways make extensive use of specialized containers for merchandise services, which they consider superior to highway trailers on flat cars.
- Fragile freight is handled in special "shock absorbing cars" equipped with rubber padded "buffers" and longitudinally sprung floors.
- The British Railway's annual freight claim bill amounts to slightly less than one per cent of the system's gross revenue. Theft constitutes a larger portion of the total than in the United States because of the large volume of rationed articles carried.
- An entirely new fare structure—nine-day unlimited passes good on all trains, for any distance in the British Isles at a cost of $45 first class or $30 third class—would be available to U.S. and Canadian tourists beginning May 1.

Mr. Blee is making a five-week tour of this country and Canada, studying American railroad practices and conferring with American railway management.

I.C.C. Refuses to Reopen Western-Tourist-Fare Case

The Interstate Commerce Commission has refused to reconsider the decision whereby its Division 2 authorized western railroads to cancel most of their so-called intermediate-class fares, which have applied for travel in tourist sleeping cars. The reconsideration was sought in a petition filed by the Secretary of the Army.

Rail Wage Board Reports On Six Months Operations

The Railroad and Airline Wage Board handled 450 railroad cases during the first six months of its opera-

News Briefs . . .

. . . In a jumbo pamphlet being mailed to all travel and ticket agents, the Santa Fe calls attention to its full-color travel promotion ads scheduled for reproduction in a large number of popular consumer magazines. In addition, the road shows how these ads are backed up by: (1) display and poster tie-ups in travel bureaus, department stores and luggage stores; (2) numerous illustrated travel folders, and (3) a library of travel motion pictures—all of which the agents are urged to use freely.

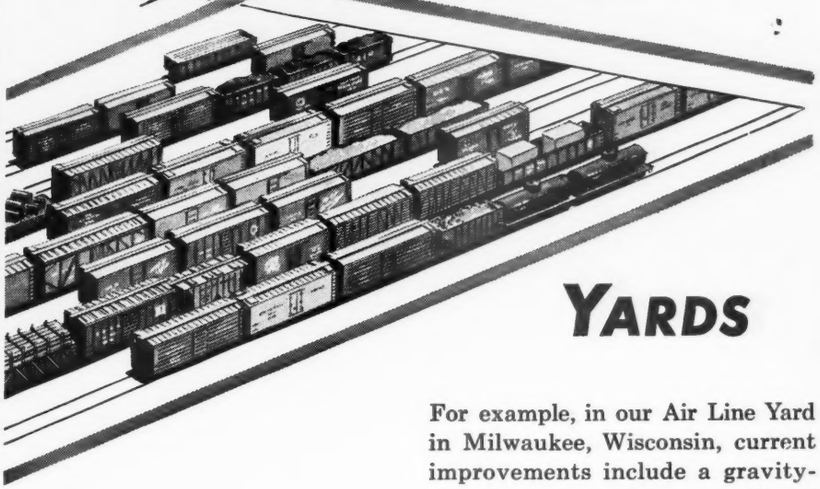
. . . The Reading began freight service to the new Fairless works of the United States Steel Company at Fairless, (near Morrisville), on April 15. To reach the plant the railroad built a 6.6-mile branch line from Fairless Junction (formerly Glen Lake), a point on the main line to New York, to a connection with a new industrial spur serving the Fairless works. The new branch, known as Morrisville branch, fully described in *Railway Age* December 3, 1951, page 82, is supported by a yard at Woodbourne, with a capacity of approximately 400 cars.

. . . The Lehigh Valley, which has been fully dieselized since last September 14, has equipped a car to be devoted particularly to safety work and diesel locomotive instruction classes. The car has a seating capacity of 38 and has been fully equipped for the type of instruction necessary.

. . . The Chicago & North Western is conducting tests of the Burroughs Adding Machine Company's "Ticketeer"—the automatic ticket printing machine that handles both the ticket printing and ticket sales accounting by use of "matrices" selected by the seller. One machine is being used in the main ticket office in actual sales work, while a second has been placed on demonstration in the main waiting room. This latter machine prints special "souvenir" tickets which are handed to patrons watching the demonstration. The tests are being conducted to explore *(a)* faster sales service to the public and *(b)* "streamlining" of ticket sales accounting.

BOTH STREAMLINED...

HIAWATHAS



YARDS

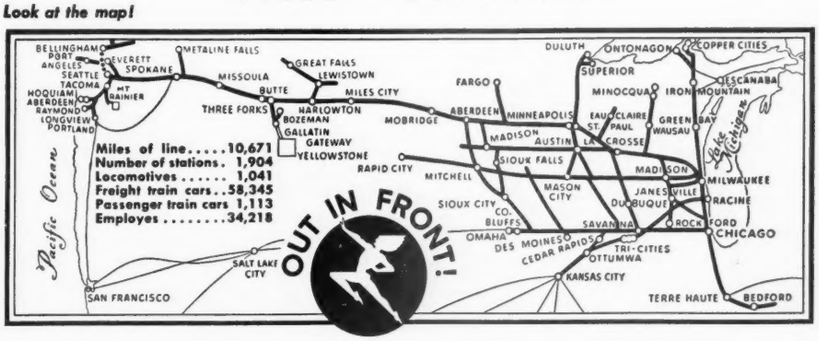
Anybody can recognize a streamlined train when he sees one. It takes an experienced railroader to recognize a streamlined yard.

Yet up-to-date, automatically operated yards are essential to the expeditious handling of the nation's freight traffic.

For example, in our Air Line Yard in Milwaukee, Wisconsin, current improvements include a gravity-retarder system for faster sorting of cars—"talk-back" loud speakers—teletype for transmitting information—pneumatic tubes for handling waybills—magnetic tape recording of train data—flood lighting—radio dispatching of engines. The net result will be a doubling of the yard's car handling capacity.

SHIP—TRAVEL

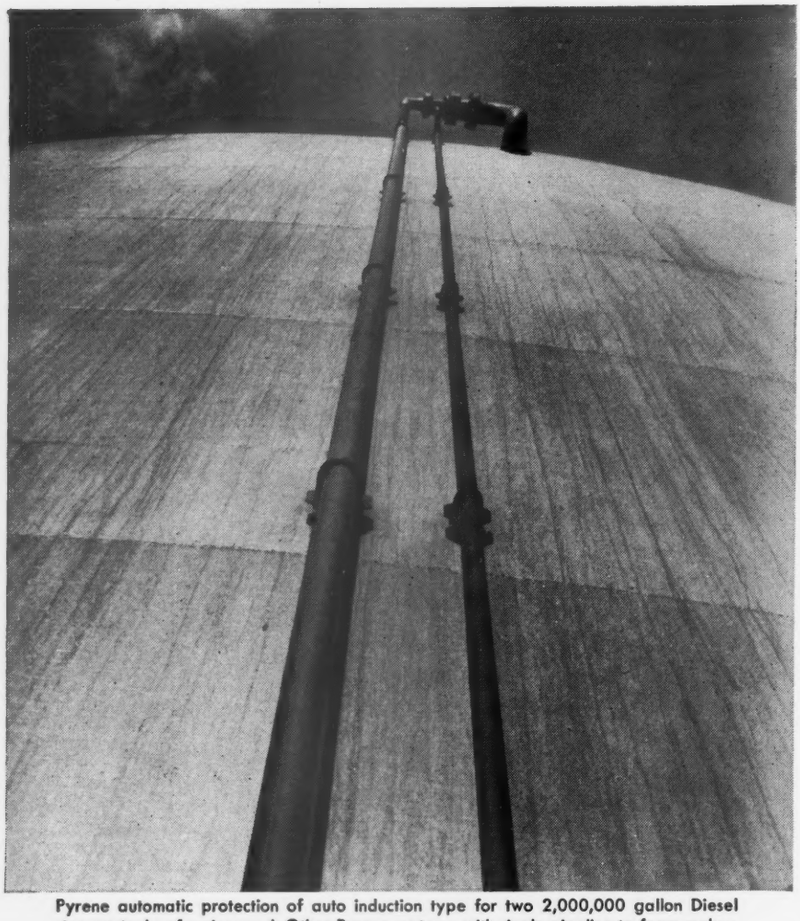
Look at the map!



THE MILWAUKEE ROAD

Route of the HIAWATHAS

CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD



Pyrene automatic protection of auto induction type for two 2,000,000 gallon Diesel storage tanks of major road. Other Pyrene systems, with single pipeline to foam maker, use other methods of foam compound induction.

AIR FOAM FIRE PROTECTION FOR DIESEL HAZARDS

in storage tanks, repair shops, locomotives

The danger of Diesel fire losses *can be eliminated.* Many major lines have done it by installing Pyrene* Air Foam equipment.

Pyrene Air Foam kills fire in seconds, requires little space, is extremely flexible. Storage tanks of any size can be protected with systems delivering hundreds or thousands of gallons of foam a minute! Completely automatic tank systems are available. No matter what the size of a Diesel repair shop, there's Pyrene equipment for it. Pyrene makes units to protect entire locomotives, yet small enough to fit comfortably into cramped quarters.

No special training is required to operate Pyrene equipment. It's simplicity itself. Most manual equipment—even the largest—can be handled by one man.

Call on Pyrene engineers to help you solve *your* fire protection problems. Write for free Pyrene Air Foam catalog—a valuable reference work.

*T.M. Reg. U.S. Pat. Off.

AMERICA'S MOST COMPLETE LINE OF AIR FOAM EQUIPMENT

PYRENE MANUFACTURING COMPANY

678 Belmont Avenue Newark 8, New Jersey

Affiliated with C-O-Two Fire Equipment Co.

tions, which was the period from October 12, 1951, through March 31, 1952. This was shown in a recent board report which also showed that there were 77 railroad cases awaiting decision on March 31.

The board is a unit of the Economic Stabilization Agency. It was established to administer the wage and salary phase of the stabilization program as it applies to employees subject to the Railway Labor Act. Its three members, who serve on a part-time basis, are: Chairman Nelson M. Bortz; Francis A. O'Neill, who is also a member of the National Mediation Board; and Walter T. Nolte.

"Railroad cases," the report said, "fell into two major types. A substantial number of applications were processed as following the pattern of the National Nonoperating Agreement of March 1, 1951, and the Brotherhood of Railroad Trainmen's National Agreement of May 25, 1951 . . . Another relatively large group of railroad cases involved adjustment of inter-carrier or intra-carrier inequities. In the main these consisted of minor increases for specific crafts or groups of individuals."

I.C.C. Bureau Issues "Special Freight Statistics"

"Selected Special Freight Statistics," a 64-page statement, has been issued by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. It is Statement No. 524.

A foreword by Bureau Director W. H. S. Stevens had this to say: "Much useful information about the freight operations of various types of transportation have been contained in little known and generally nonrecurring sources of relatively limited or no distribution. The statistics presented in this statement, therefore, are 'special' in that for the most part they have been taken from such sources or represent compilations made for this release . . . The statistics are 'selected' in the sense that, out of the great mass of such 'special' statistics, only those believed to be of value to a substantial number of users have been included."

The statement was prepared by Paul L. Ambelang, under the supervision of C. S. Morgan.

N. of M. Creates Special Equipment Department

To supervise repair and reconstruction of equipment, with a view to obtaining maximum use of it, the National of Mexico has announced creation of a special technical department of motive power and machinery.

Functions of the new department, it is reported, will be: (1) study and appraise probable future demand for railroad transportation in Mexico; (2) study and appraise depreciation of locomotives and other rolling stock; (3) establish a program for acquisition and

repair of equipment; and (4) determine the quantity of material needed annually for an adequate repair program. In carrying out these functions, the department also will be charged with working out plans for use of more efficient methods both in repair of existing equipment and acquisition of new equipment.

Waybill Studies

Waybill studies issued recently by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission include: Statement No. 526, Distribution of Petroleum Products by Petroleum Administration Districts—Third Quarter of 1951; and Statement No. 5210, Quarterly Comparisons of Traffic and Revenue by Commodity Classes—Terminations in Third Quarter, 1947-1951.

C. & O. Stockholders Visit Richmond Shops

Something new—or at least unusual—in the way of stockholders' meetings was provided by the Chesapeake & Ohio at Richmond, Va., on April 24, when the railroad's owners were taken on a tour of their Seventeenth Street shops.

Following the business portion of the road's annual meeting, those attending were served a buffet luncheon, and then transported by bus to the shops, where various types of locomotives and freight and passenger cars were on display. Each stockholder was provided with an illustrated meeting program and tour guide containing facts and figures on the shops and the rolling stock exhibited.

A.A.R. President Addresses Railway Women's Group

The railroads are in the forefront of the fight to preserve the American free enterprise system, William T. Faricy, president of the Association of American Railroads, said in an April 19 address at the first biennial dinner of the Washington (D. C.) Chapter of the Railway Business Women's Association.

The dinner, held in Washington's Shoreham Hotel, was the feature of several events on the program of the chapter's "biennial week-end party," which also included an April 20 luncheon and sightseeing tours.

Mae E. Hayes of the A.A.R.'s Car Service Division, who is president of the chapter, presided at the dinner. The "biennial committee" was headed by Eunice Thomas of the Washington Terminal.

In his discussion of the fight to preserve the free enterprise system, Mr. Faricy noted that the railroads are a "major part" of that system which, in

Port Covington
— a picture we're proud to be in

WESTERN MARYLAND'S
100 YEARS OF PROGRESS

a commendation
to high efficiency

Kinnear takes pride in the work they have been commissioned to handle for the "Fast Freight Line". And rightly so, since the efficiency of Kinnear Rolling Doors has been so fact-proved for over a half century, for all types of freight handling and transportation buildings throughout the world. The interlocking steel slat curtain coils out of the way with smooth, vertical action, providing maximum efficiency plus protection, long service life and low maintenance. Ask for your copy of the latest Kinnear Catalog. Write *today.*

The KINNEAR Manufacturing Company

FACTORIES
2020-40 Fields Avenue
Columbus 16, Ohio
1742 Yosemite Ave.
San Francisco 24, Calif.
Offices and Agents in Principal Cities

SAVING WAYS in DOORWAYS
KINNEAR
ROLLING DOORS

Experience Proves Their Value!

MOBILIFT Stand-Up FORK LIFT TRUCKS

...More Maneuverable
...Quicker
...They Do More Work

Across the nation industries agree that MOBILIFT'S 15 years experience in building and improving STAND-UP fork lift trucks assures an efficient, hard-working truck . . . speedy and maneuverable in tight places.

Operators prefer MOBILIFT'S unobstructed visibility . . . easy, less fatiguing handling . . . safety.

Whether you need a 2,000-lb. capacity fork truck with 63″ mast for loading and unloading trucks, or a 3,500-pounder with 72″ mast and 110″ lift for your warehouse...a MOBILIFT *Stand-Up* model will do your job quicker, safer, and at less cost.

Unequalled maneuverability...short turning radius ... unobstructed forward-backward visibility . . . grouped push-pull, positive action controls...safe "deadman" brake . . . these and other *exclusive* features make MOBILIFT *Stand-Up* models equally fast and efficient in crowded or roomy work areas.

Lev-R-Matic DRIVE

Lev-R-Matic, grouped 2-way PUSH-PULL levers give instant, finger-tip control... forward, back, elevating, and tilting. MOBILIFT multiple disc clutch insures smooth, positive action . . . THERE ARE NO GEARS TO SHIFT!

Mobil-Chain Lift...Controlled power, roller-chain-operated lift allows unobstructed view between uprights.

MOBILIFT'S 3-cylinder heavy duty engine is air-cooled, compact, well-balanced and operates smoothly for long trouble-free service.

STAND-UP MODELS IN 2,000, 2,500, 3,000 and 3,500-POUND CAPACITIES are available with 63″, 72″ and 83″ MASTS.
(Special Mast Heights to Order.)

WRITE TODAY FOR COMPLETE SPECIFICATIONS

MOBILIFT Lev-R-Matic DRIVE

MOBILIFT CORPORATION

835 S. E. MAIN ST., PORTLAND 14, OREGON
2317 W. 18th, CHICAGO • 790 Patterson Ave., E. RUTHERFORD, N. J.
1113 Spring St. N. W., ATLANTA • 2724 Taylor St., DALLAS
2730 San Pablo Ave., BERKELEY

"LOSSES TO SHIPPERS AND CARRIERS ALIKE"

The Traffic Club of Tulsa recently passed a resolution urging senators and congressmen from Oklahoma to see that the Interstate Commerce Commission is granted sufficient funds "to function properly and carry out the duties imposed upon it by the acts it is required to administer."

The resolution cited the commission's 65th annual report as "ineffectively showing the results of past inadequate appropriations." It urged that the commission's budget requirements be accorded "a greater measure of respect and acceptance, which is well merited in view of the well known record of economy and frugality practiced by the commission in the past." The resolution warned that unless this is done, "irreparable losses to shippers and carriers alike will continue to result."

turn, is the "supporting structure" of the freedom of thought and action of the individual.

"The overwhelming majority of the American people," the A.A.R. president continued, "want their railroads to remain privately owned and privately operated because that is our American way of life. Another good reason why most Americans want to see their railroads continue as business-managed enterprises is the vast contrast between the results of government operation of the railroads in World War I and private operation in World War II. Not only did the taxpayers make a net gain of $5,000,000 a day financially, but also efficiency was greater and service was better under private management during World War II.

"If this government wants privately operated railroads, however, it is going to have to recognize that, like any other business, railroads must have adequate earnings to support that type of operation. The alternative, which is government operation, will be far more costly and much less efficient."

Seven More RDC Cars in New York Central Service

Seven more rail diesel cars built by the Budd Company were placed in service by the New York Central on April 27. Delivery of the cars, called "Beeliners" by the railroad, brought to 18 the number in operation on the Central.

The seven latest cars operate between Jackson, Mich., and Grand Rapids; between Syracuse, N.Y., and Buffalo; between Albany, N.Y., and Poughkeepsie; and between Springfield, Mass., and Boston. Four of the seven operate

Bogue
SINCE 1892 SPECIALISTS IN FINE MOTORS & GENERATORS
CONTROLLED POWER for CAR LIGHTING and CABOOSE RADIO
FOR CHARGING 12 - 32 - 64 or 110 VOLT Radio, Car Lighting Batteries
The Modern Bogue Way WITH
RECTIFIED HIGH FREQUENCY AC
★ For new installations and replacements. The output of the Bogue high frequency alternator is rectified by a Belcon "balanced-wattage" Selenium Rectifier and regulated by a Bogue Magnetic Amplifier. No commutators—No reverse current relays.
BOGUE RAILWAY PRODUCTS:
- Alternator-Rectifier Car Lighting battery charging systems
- DC Car Lighting generators
- Internal Combustion Engine driven Car Lighting Generators
- Custom designed Control Panels
- Magnetic Amplifier Voltage and Speed Regulators
- Selenium Rectifiers
- Electronic Communication Systems
- Rotary Converters

BOGUE RAILWAY EQUIPMENT DIVISION
Bogue Electric Manufacturing Co.
PATERSON 3, NEW JERSEY
BOGUE PRECISION POWER

in the Boston-Springfield service. In several cases the "Beeliners" provide additional service, while in others they replace steam trains and provide faster schedules.

Running time between Jackson and Grand Rapids has been cut 25 minutes westbound. The Massachusetts "Beeliners" provide better connections at Springfield for New York, and at Albany for points west. The Poughkeepsie-Albany car will perform commuter service. The Syracuse-Buffalo "Beeliner" makes two round trips daily except Sunday, with the morning trip, which leaves Syracuse at 7:50 a.m. and arrives in Buffalo at 10:30 a.m., connecting for Niagara Falls.

February Accidents

The Interstate Commerce Commission has made public its Bureau of Transport Economics and Statistics' preliminary summary of "steam railway" accidents for February, and the first two months of the year. The compilation, subject to revision, follows:

Item	Month of February 1952	Month of February 1951	2 months ended with February 1952	2 months ended with February 1951
Number of train accidents*	869	948	1,770	1,972
Number of accidents resulting in casualties	48	46	100	106
Number of casualties in train, trainservice and nontrain accidents:				
Trespassers:				
Killed	63	61	117	108
Injured	58	50	122	107
Passengers on trains:				
(a) In train accidents*				
Killed	..	82	..	82
Injured	38	745	55	749
(b) In trainservice accidents				
Killed	..	1	1	1
Injured	123	126	267	250
Travelers not on trains:				
Killed	..	..	..	..
Injured	68	63	124	129
Employees on duty:				
Killed	24	39	61	71
Injured	1,673	2,030	3,648	4,214
All other nontrespassers:**				
Killed	137	142	305	298
Injured	480	526	1,047	1,228
Total—All classes of persons:				
Killed	224	325	484	560
Injured	2,440	3,540	5,263	6,677

*Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former caused damage of $300 or more to railway property in 1951. Beginning January 1, 1952, this minimum was raised to $325. Only a minor part of the total accidents result in casualties to persons, as noted above.

**Casualties to "Other nontrespassers" happens chiefly at highway grade crossings. Total highway grade-crossing casualties for all classes of persons, including both trespassers and nontrespassers, were as follows:

Persons:				
Killed	134	133	290	278
Injured	353	346	758	855

February and March Employment

Railroad employment, which had decreased 0.29 per cent—from 1,221,846 to 1,218,281—between mid-January and mid-February, increased by 0.2 per cent—from 1,218,281 to 1,220.658—between mid-February and mid-March, accord-

A NEW Service to Railroads
• PRESSURE CREOSOTED TREATMENT
• PRESSURE PENTACHLOROPHENOL TREATMENT
• Treated in our modern, new treating plant at Diboll, Texas. Write or call for price information.
SOUTHERN PINE LUMBER CO.
MILLS: DIBOLL and PINELAND, TEXAS
SALES OFFICE: TEXARKANA, TEXAS
POLES TIMBER LUMBER PILING FENCE POSTS

Preserve TREATED MATERIALS

ing to the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission.

The mid-March total was 4.2 per cent below that of March 1951; while the mid-February total was 2.78 per cent below the February 1951 figure.

The index of employment, based on the 1935-1939 average as 100, was estimated at 122.6 for March and 122.4 for February, compared with 128 for March 1951, 125.9 for February 1951, and 124.5 for January 1952.

March employment was above that of February in five of the seven groups, the increases ranging from 1.36 per cent for transportation employees (yardmasters, switchtenders and hostlers), down to 0.16 per cent for executives, officials and staff assistants. Decreases—both under 1 per cent—occurred in the train and engine service and maintenance of equipment and stores groups. February employment, in turn, was below that of January in four groups and above in three. All the changes were under 1 per cent, the largest having been in the maintenance of way and structures group—0.92 per cent.

As compared with the corresponding months of 1951, both February and March showed decreases in five groups and increases in two. The March increases were 1.39 per cent for executives, officials and staff assistants, and 0.43 per cent for yardmasters, switchtenders and hostlers. February increases were in the executive group, up 1.5 per cent, and in professional, clerical and general employees, up 0.21 per cent.

Decreases in March against March 1951 included drops of 6.09 per cent in the maintenance of equipment and stores group, 5.38 per cent in maintenance of way and structures employees, and 4.88 per cent among transportation employees (other than train, engine and yard). February decreases ranged from 4.85 per cent in the maintenance of equipment and stores group to 0.86 per cent in the transportation group covering yardmasters, switchtenders and hostlers.

Social Security and the Railroad Retirement Board

Referring to a rather widespread misunderstanding that has developed regarding financial arrangements between the Railroad Retirement Board and the Federal Security Administration, the board has issued a statement explaining these arrangements as provided by the 1951 amendments to the Retirement Act.

The board emphatically denies that any large sum of money (which rumors have pegged as $700 million) is to be transferred from reserve funds of the railroad retirement account to the old age and survivors insurance funds of the social security system.

"The law," says the board, "requires the board and the security administration to determine, by January 1, 1954, the 'amount which would place the federal old age and survivors insurance trust fund in the same position in which it would have been at the close of the fiscal year ending June 30, 1952, if service as an employee after December 31, 1936, had been included in the term "employment" as defined in the Social Security Act.'"

The board went on to explain that the social security fund is to be:

(a) *credited* with taxes it would have collected on railroad employment through June 1952, and

(b) *charged* with the benefits and administrative costs it would have paid on that employment through that date.

Thus far, it said, the tax item has exceeded the disbursement item. This means there will be a net credit in favor of the old age and survivors insurance trust fund. Both the board and the administration are working out the exact amount of this credit item — which, at the time of the congressional hearings on the 1951 amendments, was estimated at about $700 million. "But," the board continued, "when the actual amount is calculated, *the money will not be transferred to the social security system.* Interest on this credit, however (as adjusted from time to time), will be paid to the trust fund. Since the money actually remains in the retirement account, it will continue to draw interest the same as other railroad retirement funds."

Beginning with 1952-53, both the board and the administration will determine each year the additional taxes the social security system would have collected, and the additional disbursements it would have paid, had railroad employment been considered social security employment.

The board explained that, "if the taxes exceed disbursements, the difference will be transferred to the trust fund. If, on the other hand, disbursements are greater than taxes, the difference will be transferred from the trust fund to the railroad retirement account, except that the security administration may apply the amount to reduce the initial credit item. It is expected that, in the future, disbursements will exceed taxes, and that the amounts the social security system will owe the railroad system each year will eventually exhaust the initial credit item. After that, actual money transfers will be made to the railroad retirement account."

Since this arrangement is connected with the transfer of credits to the social security system for employees with less than 10 years of railroad service, the board expects it will result in "considerable financial gain" to the railroad retirement system.

GREAT NORTHERN
"YOUR FREIGHT GOES GREAT WHEN IT GOES GREAT NORTHERN"
RAILWAY
Serving ten States and two Canadian Provinces between the Mississippi Valley and the Pacific Coast.

FOR FAST AND DEPENDABLE SERVICE

ROUTE VIA R. F. & P. RR, Richmond, Virginia

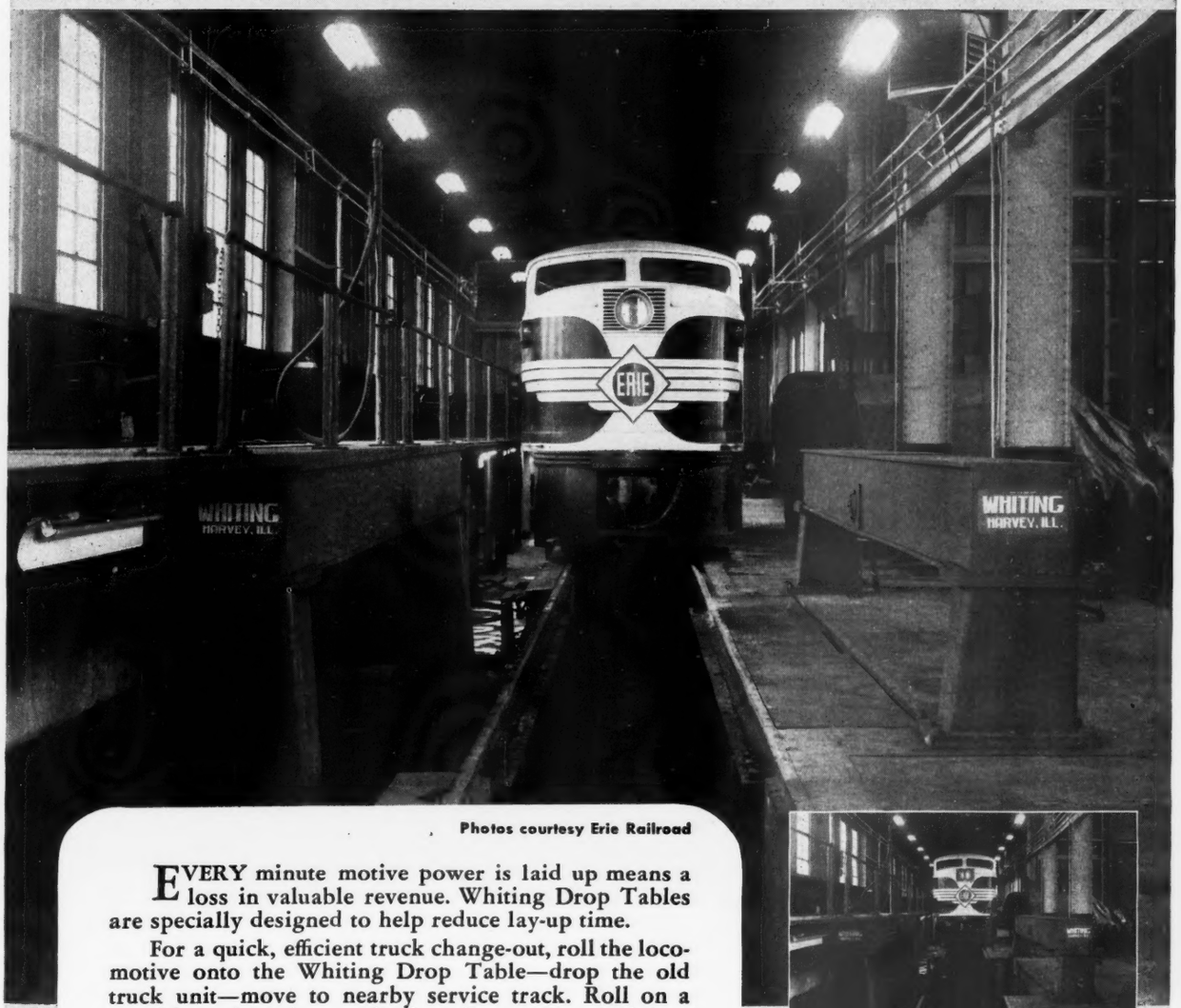
The North-South Gateway

New Diesel Locomotives Assure You of Quick Over-the-Road Operation

RICHMOND, FREDERICKSBURG AND POTOMAC RAILROAD

H. R. Powell
Traffic Manager, Richmond, Va.

Quick-Efficient TRUCK CHANGE with a WHITING DROP TABLE



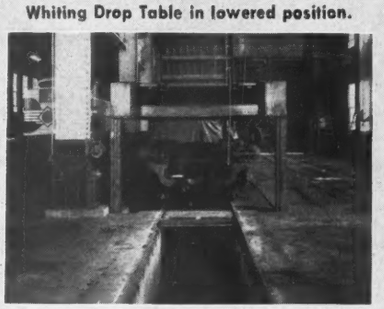
Photos courtesy Erie Railroad

EVERY minute motive power is laid up means a loss in valuable revenue. Whiting Drop Tables are specially designed to help reduce lay-up time.

For a quick, efficient truck change-out, roll the locomotive onto the Whiting Drop Table—drop the old truck unit—move to nearby service track. Roll on a stand-by unit and move back to locomotive. And, in a short time the locomotive is ready to go back on the line.

Whiting Drop Tables are available in a variety of styles and sizes. They will speed the job of dropping wheels or complete trucks on either Diesel-electric or steam locomotives, tenders, and coaches. Write for New Bulletin DT-C-404 today.

Whiting Drop Table in lowered position.



Trucks ready for release. Note—platform cover at release track automatically raised by spacer posts.

WHITING CORPORATION

15603 Lathrop Avenue, Harvey, Illinois

RAILROAD MAINTENANCE EQUIPMENT

Offices in Chicago, Cincinnati, Cleveland, Detroit, Houston, Los Angeles, New York, Philadelphia, Pittsburgh, St. Louis, and Seattle. Representatives in other principal cities. Canadian Subsidiary: Whiting Corporation (Canada) Ltd., Toronto, Ontario. Export Department: 30 Church Street, New York 7, N. Y.

OPERATING REVENUES AND OPERATING EXPENSES OF CLASS I STEAM RAILWAYS

Compiled from 127 monthly reports of revenues and expenses representing 131 Class I steam railways

(Switching and Terminal Companies Not Included)

FOR THE MONTH OF FEBRUARY 1952 AND 1951

Item	United States		Eastern District		Southern District		Western District	
	1952	1951	1952	1951	1952	1951	1952	1951
Miles of road operated at close of month	225,833	226,017	53,217	53,301	45,837	45,956	126,779	126,760
Revenues:								
Freight	$704,301,020	$600,156,697	$257,273,521	$218,946,499	$154,958,533	$134,067,788	$292,068,966	$247,142,410
Passenger	73,469,928	63,835,778	37,054,117	31,385,315	13,202,807	12,000,534	23,213,004	20,449,929
Mail	24,477,155	17,684,733	9,768,058	6,649,126	4,209,080	3,011,350	10,500,017	8,024,257
Express	9,247,075	2,756,272	3,275,233	290,274	1,940,498	587,081	4,031,344	1,878,917
All other operating revenues	33,471,307	31,392,298	14,865,588	14,305,574	6,361,709	5,739,047	12,244,010	11,347,677
Railway operating revenues	844,966,485	715,825,778	322,236,517	271,576,788	180,672,627	155,405,800	342,057,341	288,842,190
Expenses:								
Maintenance of way and structures	111,785,000	104,762,125	40,775,814	37,361,408	25,275,122	24,757,590	45,734,064	42,643,127
Depreciation	11,347,110	11,216,654	4,664,248	4,606,136	2,086,783	2,091,050	4,596,079	4,519,468
Retirements	901,097	875,534	200,679	328,929	70,952	62,450	629,466	484,155
Deferred maintenance	.....	*212,338	.....	*219,265	.....	*2 073	.....	.....
Amortization of defense projects	.....	.....	.....	.....	.....	.....	.....	.....
Equalization	5,677,136	6,018,439	2,289,407	2,414,714	1,824,931	2,479,009	1,562,798	1,124,716
All other	93,859,657	86,863,836	33,621,480	30,221,894	21,292,456	20,127,154	38,945,721	36,514,788
Maintenance of equipment	160,790,192	150,468,612	64,944,495	62,791,818	33,373,414	30,024,599	62,472,283	57,652,195
Depreciation	27,488,435	25,977,598	9,528,502	9,182,626	6,325,410	5,905,503	11,634,523	10,889,469
Retirements	*47,292	*385,129	*3,824	*13,837	*14,681	*321,816	*28,787	*49,476
Deferred maintenance and major repairs	*976,678	*2,576,766	*976,678	*2,532,217	.....	*2,992	.....	*41,557
Amortization of defense projects	.....	.....	.....	.....	.....	.....	.....	.....
Equalization	831,544	67,110	553,034	5,969	658,765	160,970	*380,255	*99,829
All other	133,494,183	127,385,799	55,843,461	56,149,277	26,403,920	24,282,934	51,246,802	46,953,588
Traffic	18,002,758	16,946,816	6,019,670	5,740,160	3,911,183	3,694,119	8,071,905	7,512,537
Transportation—Rail line	322,995,916	303,680,943	137,004,662	130,994,620	59,774,890	55,930,108	126,216,364	116,756,215
Miscellaneous operations	10,424,590	9,569,815	3,757,150	3,485,406	1,764,057	1,605,164	4,903,383	4,479,245
General	25,688,298	23,895,259	9,753,469	9,240,735	5,473,874	5,054,240	10,460,955	9,600,284
Railway operating expenses	649,686,754	609,323,570	262,255,260	249,614,147	129,572,540	121,065,820	257,858,954	238,642,603
Net revenue from railway operations	195,279,731	106,502,208	59,981,257	21,962,641	51,100,087	34,339,980	84,198,387	50,199,587
Railway tax accruals	105,892,108	72,276,680	30,216,629	23,215,352	28,622,354	19,227,865	47,053,125	29,833,463
Pay-roll taxes	23,641,408	21,960,461	9,653,995	9,059,019	4,623,038	4,288,363	9,364,375	8,613,079
Federal income taxes†	52,343,847	21,803,352	9,608,428	3,827,319	17,461.042	8,786,991	25,274,377	9,189,042
All other taxes	29,906,853	28,512,867	10,954,206	10,329,014	6,538,274	6,152,511	12,414,373	12,031,342
Railway operating income	89,387,623	34,225,528	29,764,628	*1,252,711	22,477,733	15,112,115	37,145,262	20,366,124
Equipment rents—Dr. balance	9,767,832	11,654,205	3,888,889	5,777,461	80,648	*120,132	5,798,295	5,996,876
Joint facility rents—Dr. balance	3,725,281	3,593,823	1,681,321	1,689,452	534,354	533,637	1,509,606	1,370,734
Net railway operating income	75,894,510	18,977,500	24,194,418	*8,719,624	21,862,731	14,698,610	29,837,361	12,998,514
Ratio of expenses to revenues (percent)	76.9	85.1	81.4	91.9	71.7	77.9	75.4	82.6

FOR THE TWO MONTHS OF 1952 AND 1951

Item	United States		Eastern District		Southern District		Western District	
	1952	1951	1952	1951	1952	1951	1952	1951
Miles of road operated at close of month#	225,845	226,050	53,219	53,307	45,837	45,956	126,789	126,787
Revenues:								
Freight	$1,417,206,821	$1,309,892,791	$523,316,827	$483,670,949	$314,703,541	$285,787,709	$579,186,453	$540,434,133
Passenger	155,813,061	141,994,064	79,777,599	71,536,163	26.655,507	24,869,895	49,379,955	45,588,006
Mail	49,898,711	37,110,712	19,612,355	13,963,589	8,474,146	6,448,754	21,812,210	16,698,369
Express	18,707,228	9,122,108	6,866,286	2,141,590	3,960,502	1,942,614	7,880,440	5,037,904
All other operating revenues	70,374,775	66,565,737	31,120,088	30,205,026	13,238,864	11,871,344	26,015,823	24,489,367
Railway operating revenues	1,712,000,596	1,564,685,412	660,693,155	601,517,317	367,032,560	330,920,316	684,274,881	632,247,779
Expenses:								
Maintenance of way and structures	230,321,814	211,688,342	85,484,849	76,180,265	51,527,830	49,722,553	93,309,135	85,785,524
Depreciation	22,649,872	22,423,073	9,323,630	9,208,319	4,176,461	4,180,754	9,149,781	9,034,000
Retirements	1,411,540	1,509,789	345,383	508,373	123,251	120,430	942,906	880,986
Deferred maintenance	.....	*418,743	.....	*416,670	.....	*2,073	.....	.....
Amortization of defense projects	.....	.....	.....	.....	.....	.....	.....	.....
Equalization	13,496,293	13,639,647	7,584,841	6,095,206	3,980,236	4,903,272	1,931,216	2,641,169
All other	192,764,109	174,534,576	68,230,995	60,785,037	43,247,882	40,520,170	81,285,232	73,229,369
Maintenance of equipment	328,267,131	307,714,447	132,992,562	129,475,241	68,188,651	60,871,924	127,085,918	117,367,282
Depreciation	55,077,185	52,241,846	19,293,299	18,694,027	12,620,411	11,812,720	23,163,475	21,735,099
Retirements	*151,892	*442,163	*32,582	*32,273	*38,116	*341,815	*81,194	*68,075
Deferred maintenance and major repairs	*2,008,891	*4,635,935	*2,008,891	*4,572,482	.....	*4,896	.....	*58,557
Amortization of defense projects	.....	.....	.....	.....	.....	.....	.....	.....
Equalization	1,935,943	115,986	1,198,620	*3,049	1,445,019	462,464	*707,696	*343,429
All other	273,414,786	260,434,713	114,542,116	115,389,018	54,161,337	48,943,451	104,711,333	96,102,244
Traffic	36,323,283	34,062,363	12,084,900	11,409,472	7,749,939	7,292,517	16,488,444	15,360,374
Transportation—Rail line	665,660,590	631,095,755	282,966,264	271,031,521	122,816,543	116,022,882	259,877,783	244,041,352
Miscellaneous operations	21,929,608	20,092,183	7,877,385	7,284,603	3,601,054	3,247,003	10,451,169	9,560,577
General	52,553,687	49,051,111	26,134,542	18,833,935	11,175,115	10,482,971	21,244,030	19,734,205
Railway operating expenses	1,335,056,113	1,253,704,201	541,540,502	514,215,037	265,059,132	247,639,850	528,456,479	491,849,314
Net revenue from railway operations	376,944,483	310,981,211	119,152,653	87,302,280	101,973,428	83,280,466	155,818,402	140,398,465
Railway tax accruals	206,697,408	181,224,306	59,750,753	54,933,732	56,805,334	47,069,211	90,141,321	79,221,363
Pay-roll taxes	48,219,071	45,076,098	19,659,410	18,720,011	9,473,940	8,699,300	19,085,721	17,656,787
Federal income taxes†	98,585,509	78,618,938	18,222,954	15,385,884	34,097,303	25,868,528	46,265,252	37,364,526
All other taxes	59,892,828	57,529,270	21,868,389	20,827,837	13,234,091	12,501,383	24,790,348	24,200,050
Railway operating income	170,247,075	129,756.905	59,401,900	32,368,548	45,168,094	36,211,255	65,677,081	61,177,102
Equipment rents—Dr. balance	20,921,902	24,367,764	9,706,766	12,178,889	*359,424	*625,222	11,574,560	12,814,097
Joint facility rent—Dr. balance	7,362,787	7,235,774	3,377,075	3,463,656	1,149,041	1,108,433	2,836,671	2,663,685
Net railway operating income	141,962,386	98,153,367	46,318,059	16,726,003	44,378,477	35,728,044	51,265,850	45,699,320
Ratio of expenses to revenues (percent)	78.0	80.1	82.0	85.5	72.2	74.8	77.2	77.8

Represents average of mileage reported at close of each month within the period.
† Includes income tax, surtax, and excess profits tax.
* Decrease deficit, or other reverse item.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.